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SOME ELEMENTARY CONTRIBUTIONS OF AESTHETICS TO INTERPRETATIVE SPEECH

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TOLSTOI says the art impulse is the impulse to share experience with others. Whenever an individual consciously seeks to infect a listener with the specific quality of an emotional experience, he is engaged in an art activity. Tolstoi distinguishes between such a conscious and purposeful endeavor and the unconscious "instinctive" expression of the emotions. A human being participating in a life situation which powerfully excites his emotions may unconsciously, through his behavior and the sounds he utters, "express" his emotions. Any such experience isolates him from his fellows, throws him back upon his own individual resources, and compels him to struggle for his security or perhaps for life itself. When afterward in the presence of his fellows he yields to the impulse to share this experience with others, he is satisfying a need of his nature to close the gap that has opened between himself and others during his period of self-centered struggle. Shakespeare recognizes this truth when he makes Hamlet, after his escape from the pirates, write Horatio a letter pulsating with eagerness to tell the story of his adventures to his friend. The art impulse, then, seems to serve a need of human nature to reorient the self to the society which has helped to form the self; for the *self* is formed through a process of inner-action between the individual and other persons. No human being recognizes himself or knows himself or feels secure in himself except in so far as he recognizes in the responses of others to him a satisfying reflection of himself. Lacking such satisfying responses in the behavior of others toward him, he feels isolated, alone, unappreciated, and incomplete.

The function of interpretative speech in life, as in literature, is to bridge these gulfs that are constantly opening between the self and other persons. Art is the one great mediator between the individual and his fellows. It is this fact which may in part account for the persistence of the art of oral reading or the art of the oral interpretation of imaginative literature. The thing that cannot be told by the individual, immured within his walls of repression, is told by the poets, the makers of illusion. They put into words what the reader cannot put into words for himself. With words as their medium, they create forms of literary art within the conventions of which the reader may move and speak out the secrets of his life with articulate abandon.

Oral reading then may be defined as the sharing with others of the reader's experience as he has recognized it in stories, poems, plays, and informal essays. The reader, we may assume, has exposed himself to a piece of imaginative writing. In a mood of poetic faith, credulous and suggestible, he has submitted himself to the stimulation of an imaginative writer's words. He has been at first passive, receptive, and more or less expectant; but latent within him are the potential energies of his biological drives. He has done some things to life, but life has done more things to him. Routine has drilled him to the hour hand of the clock. Social compulsions have coerced him into patterns of behavior useful to his fellows, or at least tolerable by them. The social censor, his "superego," has whispered many a warning hush-hush to his impulses. To the casual observer, he may appear to be a model of conformity, a perfect social robot.

But underneath this surface appearance, the true reader is a seeker, an explorer. He is not content to remain an agglomeration of miscellaneous, unordered experiences. He may conform, he may obediently follow the routine of a useful and respectable citizen; he may pay lip service to the community gods. He may practice his manners when he meets Mrs. Grundy; but if he does so, he does it with the reservation of his freedom to search elsewhere for the realities by which he must live, realities which lie below the surface of appearances and of social convention. He is a devotee of human values and persists in his search for them. In his search for them, he refuses to abide by inherited dogmas and prescriptive formulas. He respects knowledge but worships no knowledge as a final revelation. He lives in a world in flux. Within him are constantly springing up new urgencies toward an understanding and acceptance, and

a new ordering of his life. He is young, he matures, he may grow old, but learning is never at an end. The goal of his learning is not knowledge for its own sake, but insight into what life has done and is doing to him. In the world without is chaos. His is the sole responsibility for ordering his life. Were he only a biological animal, the problem would not exist; but he is also an imagining animal, a repository of residual memories, a spontaneous generator of fantasies and day dreams, haunted by fears, buoyed up by hopes, tugged at by regrets, at times isolated from his kind and fearsomely alone. For guidance in his adventuring through life, he has learned he can best trust the men of imagination who, having lived both more intensely and more extensively than has he, have observed the passing show with more acuteness of insight and have mastered a technique of words by which they block out designs of life more true to life than life itself, because more orderly and purposeful.

It is a commonplace that literature finds an appetite for vicarious or substitute experience. It functions by reinstating, extending, and clarifying the primary experiences of the reader. The imaginative language functions by stimulating the imagination, not by transferring or communicating thought. It does not organize concepts in a sequence of logical reasoning. Many a shop girl, incapable of logical thinking, is every day transported out of her dreary routine and cast in the role of the heroine of a love story. So great is the prestige of intellect, of reasoning, of knowledge as an end, that pride of intellect, of scholarship lures teachers of literature away from their primary responsibility of "entering into the inwardness of art," and of inducting his students into that inwardness. Of such teachers, Professor Foerster remarks, "In all their serious activities, their research, their articles and books, their college or university instruction, they commonly proceed as if unaware that their subject is literature and that the central means of understanding literature is not historical erudition but disciplined natural sense." He goes on to mention Addison's contrast between "the pedantic critic" and a "simple young lady devoid of rules but possessed of 'natural sense,' much (he says) as a satirist today might contrast the pedantic professor with an untutored woman — I could name one myself — who understands literature far better and who could explain the knotty lines of a poem to the scholar helpless amid all his paraphernalia." [1]

Most teachers of literature seem to assume a degree of aesthetic

[1] Norman Foerster: *The American Scholar*, p. 14.

maturity that their students do not possess. Their methods of teaching and examining their students arouse in students motives which make an aesthetic experience of literature almost impossible. The prerequisite of aesthetic appreciation of anything is that the experiencing nature be freed from all incitements to struggle for self-preservation. It occurs only during a cessation of the struggle for existence. And yet, by making the passing of an examination the goal of a course in literature and by setting up, as a means to that end, the mastery of a detailed enumeration of biographical, historical, grammatical, and linguistic details teachers plunge their students into just such a struggle. Such students are in an anomolous, a paradoxical situation. They must read imaginative literature in order to pass an examination at the end of the course, and yet they cannot be receptive to it without forgetting every self-interest. If a masterpiece is to become for them a work of art, they must become submerged in it to the disregard of every practical consideration. They must present to it a freely experiencing nature. It must transport them, if it is to register its full effect, out of the world of their calculated strivings into a selfless world of the imagination. Students who read from a motive of passing examinations, all too frequently defeat the intention of even the greatest writers. Such students are undergoing a training as anatomists of literature, not as participants in its abundant breathing life. It takes a tough and resilient aesthetic constitution to survive this anaesthetizing pedagogical process. Students learn what they must learn in order to achieve academic survival. They become experts highly skilled in divining "what the teacher wants," and they, at least the more intelligent ones, give it to him in the final examination. Of such examinations Stanley Leathes has written,

> As mines and manufacturers devastate the countryside, so do the methods of teaching connected with them devastate the matter which they attack. Theological examination spoils the Bible, grammatical examination spoils Greek, physiological examination spoils the frog. Examination like mines and manufactures, is necessary; but to examine in English Literature is like opening a coal mine in the Lake District.

Whether it is possible to devise examinations to test students' aesthetic appreciation of literature may remain an open question while we attempt an explanation of the aesthetic experience of literature. "What is this extraordinary pleasure that we derive from this pastime of reading?" asks Rose Macaulay. "Why do we forget everything for it, feel by it transported, enslaved, freed, impassioned,

enlivened, soothed, drugged, delighted, distressed, entertained, sharpened in wits, ennobled in soul, winged in imagination, gratified in humor, stirred in pity, rage, love, rapture, enthusiasm, creation, zeal for learning, infinite zest and curiosity for life?" She answers, "I do not know, nor anyone." [2]

It may be that no one can give a complete or final answer to these questions, but many a confirmed reader has essayed his own answer. The true reader has an appetite for life in excess of that which can be satisfied by mere biological existence. The ordinary routine of his daily work, the activities prescribed and approved by social convention do not satisfy his craving for being alive and for a heightened awareness of being alive. Literature satisfies his craving for a more abounding life.

Literature, more richly and in more detail than any other art, mediates between the self and what the self has undergone. "Art is a method of dealing with our experience of the world," says Archibald MacLeish. It

> makes that experience, *as* experience, recognizable to the spirit. There are other methods of dealing with our experience of this earth which translate it into intellectual terms or extract from its moral meanings. Art is not such a method. Art is not a technique for extracting truths, nor a system of signals for communicating explanations. . . . . Art is an organization in terms of experience, the purpose of which is the recognition of experience. It is an interpreter between ourselves and that which has happened to us, the purpose of which is to make legible what it is that has happened. It is an organization of experience comprehensible not in terms of something else, but of itself; not in terms of truth even, but of itself. The truth of a work of art is the truth of its organization. It has no other truth.[3]

Literature extends our capabilities for experience beyond the limits of any human life cycle. It arouses imaginal activities which carry us far backward in time and projects us far into the future. A play or a novel condenses and packs into a few hours an organization of wishes, desires, struggles, successes and frustrations, which while analogous with our own wishes, desires, struggles, successes and frustrations, would require several lifetimes and reincarnations for one person to live through.

Even more important is the fact that literature, for the receptive reader, presents primary data of life. Great writers speak out. They say what we cannot, dare not say; they reveal what their readers have not recognized. They plough up the surface of convention and

[2] Rose Macaulay: *Personal Pleasures*, p. 336.
[3] *Atlantic*, June 1939, p. 825.

discover what lies beneath in business, education, religion, art, and the family, as well as in the personal experience of the individual. Dogmas, doctrines, and institutions which society seems to accept as eternal because sanctioned by custom they show to be only the means by which men and women have been trained in habits of conformity, while beneath their stereotyped behavior lie the realities by which they live. *Great writers constantly challenge their readers to discriminate between their habits of conformity and the life of the free imagination.* They enormously enlarge the opportunities of choice, of acceptance and rejection of alternative possibilities. They disclose truths of experience not admitted by the "social censor" to the processes of conscious thought. They fertilize thought and reveal reality to the philosophers themselves. What Whitehead has said of the history of thought in general is as true of the thinking of the individual. "The history of thought," he says, "is a tragic mixture of vibrant disclosure and of deadening closure. The sense of penetration is lost in the certainty of completed knowledge. This dogmatism is the anti-Christ of learning."[4] Literature challenges "the certainty of completed knowledge." Archibald MacLeish, John Steinbeck, Clifford Odets know that our so-called triumphs of science, and their practical applications, increase rather than make good our emotional deficit.

The oral reader must first have a matured experience of what he is to read before he presumes to read it. His reading, if it is to have authority, must be a sharing with others of his own experiences, as selected, heightened, condensed, and organized for him by poets, playwrights, and writers of fiction. To read with authority, he must master the material to be read in terms of the purpose of the author.

The general purpose of all imaginative literature is transport or imaginative illusion. To incite transport or imaginative illusion in an audience, a reader must first have yielded himself to it. Two laws the creative artist must obey: he must first submit himself to his material; second, he must dominate that material, select from it the elements that affect him, according to his own predisposition and temperament, and impose on these selected elements an order that satisfies him. *Only in a limited sense is the oral reader a creative artist.* The writer has already done the work of observation, selection, and organization. It remains for the reader to submit himself,

[4] A. N. Whitehead, *Modes of Thought*, p. 81.

with all his powers of memory, imagination, and insight to the author's organization as recorded in words.

What do the words of an exciting tale do to the reader of that tale? Do they stand for thoughts? Do they stimulate primarily the processes of reflective thinking? Literature does generate thought in readers capable of thinking, but only after the data are all in, only after the writer has had his way with his reader, only after the reader, through a process of interaction between what he brings to the reading of the author's book and what the writer presents, has entered into a mode of experience imposed on him by an imagination which, at least for the time, *arouses and controls* his own.

No reader habituated to the conventions of imaginative literature attends to the words he reads. His eyes scan the words, but he attends to imagined situations as they follow each other in a succession bound together by the wishes, desires, and struggles of imaginary men and women. The reader, like these imaginary persons, has striven and is striving, toward goals of desire. Many of his wishes and dreams repressed or frustrated in his actual life, find their fulfillment in the tales he reads.

Not only stories that turn out well serve the reader's desire for a heightened sense of experience, for a more abundant life. Portrayals of the tragic fate of man have the power, even more than stories of his prosperity, to create within him an intense and vivid sense of life. Tragedy releases deeper, more unexpected emotional energies. It transports more completely from the world of practical interests our private and personal concerns. It has on us the effect of being swept away by forces we ourselves might have set in motion. Man's pursuit of his own illusions of love, ambition, revenge leads him into a trap of fate. The tragic character, in the midst of the crumbling world he would create, remains a hero, ennobled by his invincible loyalty to the central absolute of his nature. Macbeth's ambition to be king, inflamed and made plausible of accomplishment by the incitements of his wife, drives him inexorably toward his fate, so that when with the imagination of a poet-murderer he conjures up hallucinations of horror to set the stage for his cold-blooded murder we are swept into his world of fantastic terrors. With him we throw off all bonds that tie us to a moral universe. With him we feel the nausea of horror and despair after the murder, the welling-up of the sick fear and disgust at his bloody hands. With him we share the feeling of fearful isolation from all human kind, and with him we start in terror when there

sounds the knocking at the gate. Into this world of self-created horrors flows like a tide the world of living men, and we thrill with pity and terror as we hear his despairing cry of tragic irony, "Wake Duncan with thy knocking; I would thou couldst!"

In this process of achieving transport there is involved the acceptance of inevitability in the sequence of events. The sequence of events is a sequence of actions performed by the characters in a play or story, or by a poet who has written a poem. Its genesis is always a desire, and this desire, whether adjudged by the final event to have been rational or non-rational, is always pre-rational. It is the premise of the action. Like the major premise of the formal syllogism, it proves nothing. It is imputed by the author to his most active and aggressive character as the primary energizing force of the dramatic conflict. It initiates the action, and as it arouses opposition the action becomes more and more complicated. It may be one of the primary drives of human nature, a modification of a drive, or the motivation may be more complex. The moving force may be a sentiment. Macbeth's desire to be king and Soames Forsyte's acquisitiveness are modifications of the universal desire for security. Hamlet's categorical imperative to avenge the murder of his father is a sentiment. Whatever the energizing force of desire which initiates an action, other actions follow as effects, which in their turn act as causes to produce other effects. The action may be simple or complicated. It may have one thread or many. But always the sequence is one, not of thought or reason, but of cunningly contrived arousal and release of emotional potentials latent in the reader.

Poe's description of the pestilence in "The Masque of the Red Death" arouses an ancient fear. This fear incites to flight, to a search for a place of security. Prince Prospero retreats with his favorites to his castellated abbey. The desire for security is symbolically satisfied when he has smiths come with hot forges and rivet shut the gates, so that none may either leave or enter. But wait! Are the fugitives safe from the plague? Prince Prospero has abandoned his people to its ravages. Can he, in making himself secure, ignore his responsibility to them? The reader's sentiment of justice, or sense of a ruler's responsibility for his people, has intruded itself and arouses a premonition that this security will prove to be only the self-deception of the Prince and his followers. The revelries heighten the reader's sense of outrage. The great ebony clock ticks away hour after hour, as the orchestra plays and

the guests at the great masked ball give themselves to the dance; but when the clock sounds the hour all stand silent and even the giddiest grow pale. And here, to heighten the sense of impending doom, Poe employs pure fantasy: "To and fro in the seven chambers there stalked, in fact, a multitude of dreams. And these, the dreams, writhed in and about, taking hue from the rooms, and causing the wild music of the orchestra to seem the echo of their steps." When the clock strikes, these dreams — uneasy memories, they must be, memories of innocent joys — stand frozen in their tracks. Poe is preparing his reader for some dread event, and that event is the discovery of the presence among the guests of a masked stranger, the Red Death himself. "His vesture was dabbled in *blood* — and his broad brow, with all the features of the face, was besprinkled with the scarlet horror." When the reprobate Prince and his guests lie still in death, each, as Poe says, "in the despairing posture of his fall," the accumulated tensions of the reader are released, the action is balanced, the sense of justice satisfied.

No work of art is a work of art until it has done its work on an observer. Pages of print within the covers of a book, the musical score of a symphony, a bronze statue we talk about as works of art. But they can at most furnish only the cues for the observer, who must create his own work of art. The only materials out of which he can create his own work of art are the materials of his own experience. These materials are his own memories and expectancies. They are memories of his own struggles, his inner conflicts, his moments of despair, of exultation, of shame. Many are half memories, many are "physiological memories" — they have fallen into the limbo of the forgotten. For the young more particularly there are expectancies and hopes of fulfillment of budding desires that arise from the instinctive nature, the forms of whose fulfillment they have learned from social custom as embodied in laws, in the family, the church, the school, in books and plays.

No mere casual reading of a selection can be adequate preparation for its authoritative reading. Such reading requires that the potentials of "emotion memory" in the reader, as implied by the language, be tapped and brought under the control of the conventions of language and of speech. The literature of power has power to move only as it releases these latent emotional energies. A reader is caught and controlled by the logic of action only as his imagination is aroused to such a point that it carries him into situations which compel his involuntary attention. Firmly fixed habits of

casual reading, habits of reading at a distance what is required for purposes of intellectual analysis, habits of regarding literature as a product of abnormal genius, unrelated to one's own experience, all such habits and others, added to plain inertia and laziness — unawakened sympathies and narrow sectarianism — require that most students be set at work digging into what they have been encouraged to ignore as their own insignificant experiences of life. It may be assumed that every reasonably mature person has somewhere hidden away in his undivulged memories one experience to meet every need for authoritative and contagious reading. Books read with even a slight degree of avid interest have in them something nearly or remotely analogous with the reader's emotional interests. The problem is to get at it. The main obstacle is the literalistic habit of thinking about literature, a deficiency of the power to recognize similar emotions as caused by diverse objects or situations, the poetic perception of unity in diversity.

Few young men in our time are called upon to avenge the death of a father, and most young men recognize that taking the law into their own hands is prohibited by law and social convention. Not many of our respectable youths of Hamlet's age have been sympathetically cajoled into proclaiming that at certain dark moments of their lives nothing would have given them more satisfaction than to rid the earth of some obnoxious fellow mortal. Yet a little questioning will reveal the fact that not only our young men, but also most of our young women, have indulged in quite ferocious fantasies of murder. Likewise it can easily be discovered that thoughts of suicide are indulged in by perfectly normal persons as a palliative for their actual and imaginary troubles. Most persons may think they are sane, and few have studied insane persons at close range; but the fear of insanity is not uncommon, and a little exercise in candid recall usually serves to reinstate the memory of moments of incipient disintegration as a first step of one's preparation for reading aloud Poe's "The Tell-Tale Heart." If added to this be a recognition of this plausible maniac's craving for acceptance by his listeners, and the reader's zestful desire to "get under the skins" of *his* listeners, we may expect at least the raw materials of an interpretation of Poe's purpose to create an effect of horror.

It cannot be too often said that literature in no inconsiderable degree employs as its material the stuff of experience that is only dimly sensed, or not consciously recognized at all, or that is by the

devious processes of forgetting dropped into the limbo of the forgotten or the half forgotten, or at least the unadmitted, even to one's self. A young woman denied she had ever felt an impulse similar to Macbeth's determination to kill Banquo. Her classmates brought their gifts to the altar of art, but many days elapsed before arrived the day on which she came with a light in her face and said, "I have it. I've thought of it. I had my heart set on getting the lead in a play. Another girl prettier than I had the inside track with the director — or I thought she had. I schemed and planned and pulled every wire I could lay my hands on. I was about to give up; and then one night I had a terrible dream. I woke up in a cold sweat — horrified. My teeth and fists were clenched. I had just dreamed that I had strangled that girl with my bare hands." When questioned, she explained that she had tried to forget the dream, had had to force herself to tell it. "But," she added, "I feel a lot better for telling it." [5]

If this tapping of some emotional energies comprising a dramatic conflict results in the neglect of others, the effect is an unfortunate impairment of balance. We all have known young actors who, cast in congenial parts, have come under the sway of the illusion that they were actors; whereas, there was very little art in their playing of their parts. We also have known students who, in reading plays aloud, have interpreted one character with much truer authenticity than others. No one person has had all kinds of experience in equal proportions. Only a long discipline in the conventions of acting and reading can develop the powers of insight and flexible adaptation.

This is one aspect of the problem of psychic distance. Psychic distance, according to Bullough, is that condition of the enjoyment

[5] If we assume that the artist must know his materials and not merely grope for his effects, we shall be inclined to direct our students in forming the habit of the recall of "emotion memories." It was one of the methods of Stanislavsky in training his actors. It is true, of course, that this method is incomplete unless supplemented by discerning observation; but the recognition of *emotional realities* must precede the search for their objective counterparts. Perfectly neutral observation, if it were possible, could result only in a disorganized miscellany of impressions. For the artist, recognition must be a preliminary to contemplation; it is only by contemplation of his materials that he frees himself sufficiently from participation in the coercive struggles of life to be able to create a balanced and proportioned artistic composition. Theodore Meyer Greene: *The Arts and the Art of Criticism*, Princeton, Ch. XIII.

and full appreciation of a "work of art" which makes it possible for any piece of art to come within the experience of the observer without arousing him to practical action. If a play excites a spectator to the point of desire to leap on the stage and participate in the struggle going on there, he is under-distanced. If a poem or a play fails to connect with his experience, he is over-distanced. Bullough gives the example of a man in an audience at a production of "Othello."

His suspicion that his wife had been unfaithful to him made him so suggestible, made his mind so open and undefended, that he felt an almost ungovernable impulse to rush home and strangle his wife. The antinomy of "distance" is: that a play or a story must come within the experience of the spectator or reader, and yet it must not, nor any part of it, come so much within his experience that it releases an impulse to practical action. The moment this occurs the convention of the art form is scrapped. The suspicious husband was thrown off balance.—An observer at a play creates his own drama, and the essence of drama is balanced conflict. Balanced conflict within the spectator is possible only so long as he balances the motives of the opposed characters. This balance may oscillate until the final engagement, when the predetermined outcome ensues. To maintain balance requires acceptance by audience and artists alike of the conventions of the art form involved.

One serious obstacle to such acceptance in the case of interpretative speech is the persistent notion that it is "self-expression." So long as a practitioner of interpretative speech hugs this obsession he will continue to be "self-conscious," and either timid or self-exhibitory in the worst sense. Numerous writers have pointed out that primitive art has always been communal art. The dance among the ancient Greeks was regulated by law and was used for purposes of state. Among some African tribes the movements and rhythms of the tribal dances are controlled by rigid conventions, and infractions are punishable with death. All art draws its strength, its vitality, says Jung, not from the experience of the individual, but from the experience of the race. The great artist is he who, in giving form to his experiences, also at the same time articulates, enlivens, and imposes an order on the common experience.

This is the function of interpretative speech, whether it be practiced by the *raconteur*, by a reader of imaginative literature, or by actors on a stage. There is no greater bore than the hypochondriac who inflicts personal ills on his helpless victims, or the golf addict who labors under the delusion that his slices and putting misses are

materials for a universal tragedy. Such personal griefs do not come with the convention of any known art form. They fall within the category of "self-expression."

Literature, like sculpture and music, leaves records by which it may be recreated in the experience of the individual. Oral reading and acting are evanescent. They are arts of immediate contagion. Dewey criticizes Tolstoi's theory of art as "immediate contagion," but concedes, "if the time span be extended, it is true that no man can be eloquent save as someone listens when he speak."[6] As Markey has significantly remarked, we are never sure of our knowledge until it is confirmed by others.[7]

The oral reader, whose poetic faith is too weak to extend to and include his audience, must learn by experimentation how to win confirmation by his listeners. This antinomy, among others, confronts the interpreter of literature: he must obey the law of all speech, that he speak to his audience, and at the same time he must speak as one transported and living in another world. And yet the audience acts as a stimulus to touch off all his unconscious habits of conformity, whether they be habits of timidity or of bold self-assertion. They are the habits by which his fellows know him and by which he knows himself. He is under a powerful compulsion to behave as he has taught others to expect him to behave. If in a moment of abandon he captures his audience, the chances are that he will miss the effect, feel embarassed, and resolve never to lose control of himself, that is his habitual self, again. This is likely to happen unless his listeners *confirm* the success of his surrender to his imagination. Dostoieveski asks, "What is it men most fear to do?" And he answers, "To take a new step or utter a new word." Pirandello has one of his characters say, "If you think I am what I think I am, then I can be what I think." Only as the oral interpreter of literature comes to recognize that through the indirect method of literature as an art he is reading to his audience an exciting, authentic, and satisfying account of their own experiences will he acquire "the will to believe" that what he has experienced they also have experienced; as he wins for his "interpretations" the confirmations of his listeners, he will come to think of his role as that of a mediator between them and what they have undergone. In this process his private, ego-centric experiences as he has recognized them in imaginative literature will become sublimated and merged into the common experience.

[6] John Dewey: *Art as Experience*, p. 105.
[7] John F. Markey: *The Symbolic Process*, p. 140.

TESTING FOR IMPROVEMENT IN ORAL INTERPRETATION

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EVERY teacher of speech, be he in high school, college or university, must wonder from time to time just what changes are taking place in the reading ability of the members of his classes. Improvement is so intangible and so dependent upon the individual differences of the students that the teacher of the past was forced to rely upon a purely subjective standard for the basis of his judgment. Until the recording machine became standard equipment it was almost impossible to make an analysis of a selection being interpreted, for, granting that the words were supplied, nevertheless, so many factors enter into what is termed improvement in interpretation that it was utterly impossible to cover them all in the duration of a single reading. And if the selection were interpreted more than once, an individual variable entered that practically nullified the results of any analysis. Fortunately, the recording machine now makes it possible to "freeze" a speech or reading exactly as it is given, and to study the reading as long and as often as is necessary to obtain the desired information.

Realizing the futility of attempting to set up a standard of interpretation from the selection itself and then determining the individual variation from that standard, we instead decided to attempt to determine the changes in certain commonly accepted forms of emphasis resulting from a period of study in a class of oral interpretation. We decided upon inflection, pause, and extreme variation of force as important modes of emphasis in which measurable changes should occur. We proceeded upon the premise that the changes which most affect the member of the listening audience would be those discernible to the trained ear of the teacher of speech. We therefore decided upon an actual listener technique in analyzing the recorded speeches.

The subjects for the experiment were members of a class in Oral Interpretation, a mixed group including nine seniors, eleven juniors, three sophomores, and three post-graduate students. The recordings were made in the recording room of the Division of Speech, a 1938 model Fairchild portable recording and reproducing machine being used and the recordings being made on high grade aluminum disks. The microphone was the dynamic ("salt-shaker") type. As contrast

or expressed antithesis requires a great deal of emphasis to make clear the meaning, the selection "Conservatism and Reform" by Ralph Waldo Emerson was used as material. The first part of the essay consists of ten well-balanced contrasts, these ten being the portion used for the analysis.

The subjects came into the room at intervals of ten minutes, no two being in the room at the same time. They were given a copy of the essay and instructed to read it once silently, and then to step to the microphone and read it orally as though reading to an audience. As the students left the room they were requested not to mention the subject matter to other members of the class.

Blanks containing the ten contrasts were mimeographed, each line of print having an inch-wide rectangle immediately below it. The rectangle was divided horizontally by a median line. The experimenter played back the records as often as was necessary to fill in the blanks for pause, force, and inflection, pause being indicated by a short vertical line through the rectangle, extreme change of force by a solid line under the word given increased force, and inflection by a wavy line the length of the rectangle, rising above or descending below the median line as indicated by the rise or fall of the reader's pitch with relation to his median pitch.

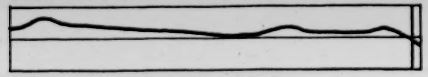
The first recording was made at the beginning of the semester. As soon as the records could be analyzed the students were given fifteen-minute individual conference periods. At this time the records were played to the students, each being asked to give a criticism of his recording. He was then shown the analysis of his record, the various factors demanding improvement being clearly pointed out. If his voice were a monotone, it was very easy to compare his analysis with that of another member of the class. If he had failed to differentiate between the grammatical and rhetorical pause, it was relatively simple to make clear this point to him. At the close of the discussion, he was again permitted to hear his record. The difference in critical ability displayed by the students following this procedure was almost unbelievable.

For the next two months the regular class work was carried on as usual, each student attempting to overcome his individual weaknesses as demonstrated by his recording. At the end of this period the second recording of the same material was made. All that was necessary for a student to be fully convinced of the improvement that he had made was to hear the contrast between the two sides of his record. The recordings were again analyzed, the second analysis of each in-

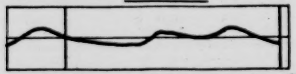
CHART OF RECORD NO. I BEFORE TRAINING

I

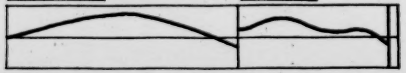
(1) Conservatism stands on man's incontestable limitations;



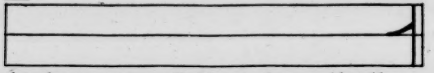
Reform on his indisputable infinitude;



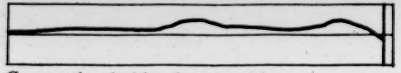
(2) Conservatism on circumstance; Liberalism on power;



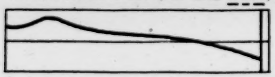
(3) one goes to make an adroit member of the social frame;



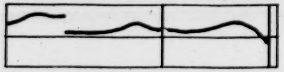
the other to postpone all things to the man himself;



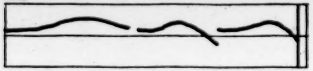
(4) Conservatism is debonair and social;



Reform is individual and imperious;



(5) We are reformers in spring and summer;



In autumn and winter we stand by the old;

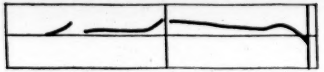


Fig. 1

KEY

Inflection

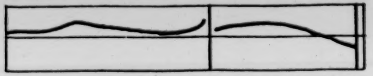
Pause

Inc. Force

Dim. Force

II

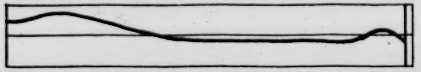
(6) Reformers in the morning, Conservers at night.



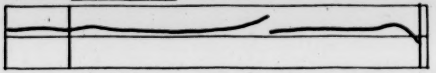
(7) Reform is affirmative, Conservatism negative;

(8) Conservatism goes for comfort, Reform for truth.

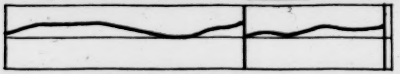
(9) Conservatism is more candid to behold another's worth;



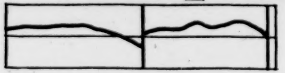
Reform more disposed to maintain and increase its own.



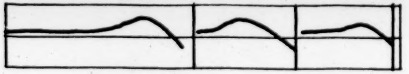
(10) Conservatism makes no poetry, breathes no prayer,



has no invention; it is all memory.



Reform has no gratitude, no prudence, no husbandry.



EMPHASIS	NO.
INFLECTION	45
PAUSE	31
FORCE	11
TOTAL	87

dividual's treatment of the material being compared with his first to determine the number of changes in inflection, pause, and extreme variations of force evidenced. (See figure below for total comparison of number of inflections prior to and after training period.)

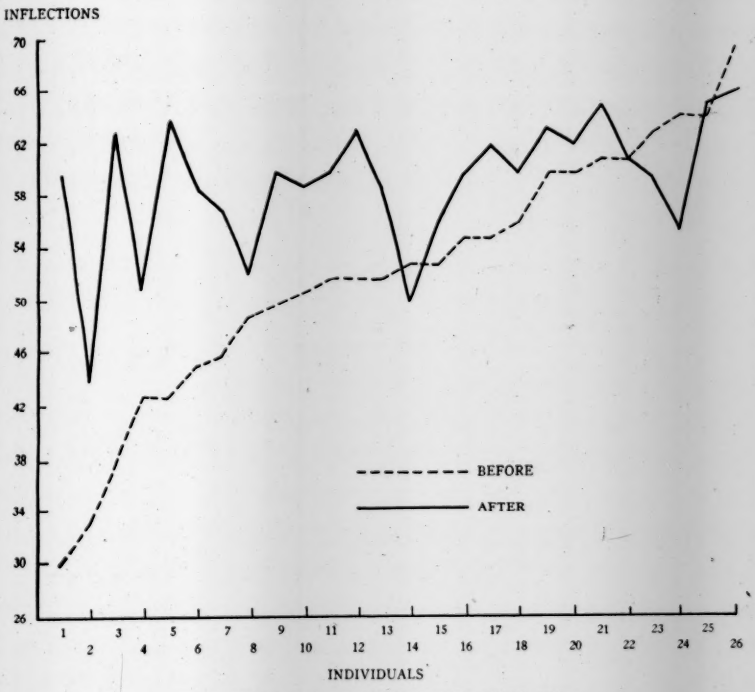


Fig. 2. Differences in frequency of inflections before and after training.

The question might justifiably be asked as to what assurance we had that our procedure was valid or reliable. It was assumed that the average teacher of speech would have little difficulty in determining a pause or cessation of speech. In order to check the experimenter's measurement of inflection, four university instructors and one graduate student in speech were asked to chart record Number One. Their results ranged from 42 to 47 marked changes in inflection, the average for the five being 45.20. These changes were charted with the same variations as found by the experimenter with the exception that some heard a few more and some a few less. The experimenter's chart for record Number One contained 45 changes. This would seem

close enough to establish the validity of the measuring technique in view of the total number of observations taken. As for the third element which was marked "variation of force," the reproducing machine was used in addition to the actual listening; following the first complete set of charts made, the experimenters re-charted the first eight records and compared with the same eight as they had been previously charted. Almost identical results were obtained.

DIFFERENCES IN FREQUENCY OF INFLECTIONS BEFORE AND AFTER TRAINING

Individual	Before	After
1	30	60
2	33	44
3	38	63
4	43	51
5	43	64
6	45	59
7	46	57
8	49	52
9	50	60
10	51	59
11	52	60
12	52	63
13	52	58
14	53	50
15	53	56
16	55	60
17	55	62
18	56	60
19	60	63
20	60	62
21	61	65
22	61	61
23	63	60
24	64	55
25	64	65
26	69	66

A study of our data and the comparison of the analyses previous to and following the two months class study period indicated the following:

1. That there was a general tendency for the individuals at the extremes to approach the mean in their use of pause.

2. That the same was true in the case of inflection except that the mean had been raised a significant amount due to training which resulted in a general leveling tendency taking place at a much higher level. It was noticeable that the students using the least amount of inflection before training made the greatest changes.

3. Radical changes of force, both positive and negative, decreased greatly

as a result of training and there was evidence to show that other forms of emphasis (primarily inflection) had been substituted for variations of force.

4. There was no significant correlation between any two forms of emphasis studied, either before or after training, indicating that they probably must be given separate treatment by the instructor.

It must be remembered that these results apply directly to expressed antithesis only. However, it is believed that there is a considerable amount of carry-over into all types of material.

While it is realized that these conclusions are but an indication of the changes occurring as a result of class study in oral interpretation and cannot be taken as definite proof, nevertheless it is from the accumulation of such data that we draw our generalizations. It is believed that its value lies not in the results *per se,* but in pointing out that the teacher of speech can work out relatively simple methods of evaluating his instruction in much the same manner as do the teachers in more tangible subject fields and in addition can make that evaluation a means of radically improving traditional teaching methods.

CHORIC READING AND KINETIC PROJECTION

CHARLOTTE I. LEE
Saint Mary-of-the-Woods College

LIKE many another campus we are already organized within an inch of our academic lives. But we felt that, the field of dramatic material for all-women casts being what it is, the verse speaking choir provided a needed medium of expression. Our experiment of choric reading with kinetic projection was something of a cross between an accident and a necessity.

Shortly before Thanksgiving, I forced myself to face two problems. My first was a verse speaking choir with no place to go. My second — Christmas six weeks away and no play or pageant that suited my standards, — my equipment, and my purpose. Taking each one by itself I found no satisfactory answer. So, like the mad chemist in a mystery play, I dumped them in together. One dissolved the other. The result was choric reading with kinetic projection. By "projection" we simply mean the method of presentation. Combined with "kinetic" it means the presentation of poetry with rhythmic movement.

However in a limited student body with an already heavy schedule of extra-curricular activities, any innovation must justify itself on many points. In the opinion of the students, it must be worth sacrificing leisure or other activities to take part in it. It must be interesting, involve active participation, and have an aura of selectness or glamour about it.

The business of organizing the choir was made a project of Players' Club. It was decided to limit the group to eighteen members. Try-outs were announced. Many more than the required number reported and were placed on a waiting list. The first meeting was exciting. The novelty appealed to the elect. The second and third meetings lacked a little of the original sparkle. It was beginning to be work. I knew I must find something to hold them until they could begin to feel the thrill of achievement and creative endeavor. What can catch and hold a too-busy group of earnest, sincere young women? Several things. But the one I decided upon was practically sure-fire. We selected costumes. The members agreed that they should be practical and sufficiently plain that they might be used for every performance. We selected long-sleeved black cashmere sweaters with boat necks. With these were worn ankle length, twelve gore skirts of heavy black rayon crepe. The problem of shoes was eliminated by the use of black cotton hose of the dime store variety. This avoided the sometimes amusing spectacle of rows of bare, pink feet, and did away with the noise of shoes as the choir members moved about.

I still had not found a Christmas program. So I wrote one. At least I would have no director-author troubles. It combined tableaux and narration written in what I fondly hope is metric prose. I arranged it for choric reading with light and dark voices and selected solo voices of both types.

Due to the peculiarities of our stage, and the many departments it must serve, we use cycloramas exclusively. The one we decided upon for the background is black. The stage being quite shallow, step units of six steps each, and about six feet in length were used at down right center and down left center. On these the choir was arranged. We have found varied arrangements of standard step units most effective for all our material. By careful lighting the effect is striking. The faces and hands stand out against the black background and give the participants an impersonal look which is very desirable when a student body lives together and knows each other too well.

The next step in the development of our experiment was immediately apparent. That was the need for action, for movement, for aliveness. We didn't want our audience counting the lights around the proscenium, which is their traditional escape from a boring speaker. The stage is so proportioned that it allows for only very limited action for eighteen people. Consequently, we concentrated on variation of hand and head positions and frequent shifting of the arrangement on the levels. And gradually it evolved!

We began with consideration of the pictorial effectiveness of tableaux which suited the mood and tempo, and suggested the meaning of the poem. Then we worked for smooth transitions from one tableau to the next. Variety of position for each part of the body is important. In businessing the material, I find it advisable to include such details as the direction the feet are set, the tilt of the head, as well as the degree of muscular tension in many gestures. They are usually designated as hard, strong, quiet, or soft gestures. The type, of course, depends upon the thought each helps express.

For the Christmas selection. *At the Feet of the Madonna,* the dark voices took the unit at the right of the stage, and light voices were on the left. At center and slightly upstage, was a four-foot level on which the Madonna sat in a high gold chair. Her gown of azure blue was accented by a robe of scarlet which trailed to the floor. Her sequin halo caught the glow from a small light hidden in the lavender wrapped representation of the Babe in her arms. As the various characters were introduced they entered to the accompaniment of the organ off stage. Their costumes were brilliant and added color to the picture. As each knelt before the Madonna a solo voice spoke for her and was answered by the dark solo voice which spoke for the Madonna. After her entrance each character took her place and remained motionless as did the Madonna. The choir moved only on the speeches done in unison or groups. For an example I quote from the script. Numbers in parentheses correspond to numbers indicating action.

TABLEAU 1

At the opening, the choir is arranged on the left and right step units. Four members are on the bottom step, three on the third step, and two on the fifth step, forming a triangle. During the opening carol by musicians off stage, they remain perfectly still, bodies facing front. Heads are turned sharply toward center at normal

height. Hands are at sides, fingers straight, palms front. The Madonna looks at the Child. She never changes position. At the close of the carol the choir relaxes hands and slowly turns heads to face out front.

All . . . Years passed since that first Christmas night

Light . . And still (1), around the little town,

Light . . A glory (2) seems to lie:

Dark . . A quiet (3) faith in Him, (*All*) the Babe

All . . . Whose coming blessed their lives.

Dark . . Oh, not as King (4), or Prince (5) He came

(1) Light voices . . both hands up to about shoulders, palms down.

(2) Light voices . . drop both hands slowly and spread them slightly in soft gesture, palm down.

(3) Dark voices . . hands to traditional prayer position at left of throat. Not quite touching at tips of fingers. Softly curled fingers.

(4) Dark voices . . right hands up to about ear level. One finger up in majestic gesture as of command, palm front, left arms bent at elbow and palm down, at waist line. Heads sharply right, slightly up.

(5) Dark voices . . heads lift sharply.

(6) Light voices . . left arm bent as if holding child palm up. Right hand close to body and above left palm down. Heads left and down. Soft gesture.

Light . . But (6) as a tiny, tender child

Light . . Who blinked (7) before the sudden light

Light . . Of stars . . . (*All*) . . . and yet was wise. (8)

(7) Light voices . . both hands quickly separate to shoulder height, palms out. Heads quickly up and front.

(8) All . . Hands down to sides slowly, heads front.

As the material changed to a more modern note the gestures lost their softness and became more muscular and angular.

TABLEAU 5

The choir has shifted its positions many times and now one member stands on the floor at the center of each unit. Behind her on step three, two are standing about a foot apart. Two are on the first step at the extreme ends, and two more at the extreme ends of the fourth step. On the top step two stand directly behind those on the third step. This forms two diamonds on each unit, with one girl at exact center between the two formations.

All . . Men draw the geometric (1) pattern
All . . Of their days in bold, (2) broad lines and circles.
All . . Whirring wheels (3), and rods (4), and cables (5),

All . . Mount in tempo (6) to a rhythm (7).

All . . Beating (8) faster (9) . . . Faster (10) . . Faster (11).

(1) All . . members forming the diamonds face the center of the formation. Sharp quick turn.
(2) All . . Shoulders back, strong, hands clenched hard at sides.
(3) All . . Heads up sharply.
(4) All . . Upstage arms up, elbows straight, fists clenched. Downstage arms down and back, fists clenched.
(5) All . . Lunge toward center of each diamond. Girl on floor at center remains with arms as others, but does not lunge.
(6) All . . Face front sharply arms still in position.
(7) All . . Face off stage sharply.
(8) All . . Both hands to breast, hard gesture, fists clenched.
(9) All . . Turn sharply to face upstage.
(10) All . . Heads turn sharply toward stage center.
(11) All . . Bodies turn sharply toward center stage.

The action continues in this manner, changing to suit the material until the final tableau which is held as the curtain goes down.

So successful was our experiment that we arranged a second program for the Lenten season. This consisted of modern religious poetry, and Hortense Flexner's lovely play of Jeanne d'Arc, called *Voices.*

We find great difficulty in limiting our selections, since most poetry which is rich in tone color is made to order for choric reading. And poetry with movement and variety in tempo is ideal for kinetic projection. The rhythmic muscular response is kept in harmony with the mood and thought it expresses. A deeper appreciation of the melody, and flow of the meter, as well as a clearer conception of the shades of mood, result from the working out of kinetic projection. We found action in unison most satisfactory for our early attempts, but as we become more accustomed to our medium we are breaking our choir into smaller action units while still keeping the same voice divisions.

In Elinor Wylie's *Church Bell,* for example, we use only selected members of the entire group. We use two units of eight steps each, rather narrow and moderately steep. These are placed together at

up left center and up right center. A level four feet high is placed on the floor at the exact center of the triangle they form. A three-step unit about six feet long is placed at the down-stage side of the four foot level. One girl stands, feet apart and hands crossed on breast, at the extreme left of the landing where the tops of the two high units come together. Eight choir members face left, each on a separate step on the right step unit, and each with arms and hands straight on the upper arms of the girl in front of her. The person next to the landing places her hands at the waist of the girl on the top. They constitute the chorus and speak their lines as they lunge backward and forward in the rhythm of the bell's ringing. At intervals they face forward or drop their hands as the bell breaks out of control. On the four-foot level a solo voice has action done sitting or kneeling, which is in counter-rhythm to the group, and which corresponds to the movements of a second solo voice kneeling at the left of the low step unit.

Students are encouraged to arrange material which they consider suitable. We have used some Millay, Sandburg, Sarett, even some of Elizabeth B. Browning's sonnets. Last Christmas we did *Lady of the Market Places* in which we abandoned our black costumes for the colorful dresses of Mexican peasants. Our most exciting experiment was the adaptation of Archibald MacLeish's new play *Air Raid* which was originally written for radio. The field is as broad as the world of poetry and rhythmic prose. It requires only a few things; an appreciation of the power of words, attention to voice and muscular control, free bodily action, and an urge to express that pent-up feeling of beauty which must be shared.

THE COLOR-BLIND ALSO GO TO THE PLAY

DEAN FARNSWORTH
New York University

WHILE total color blindness, in which everything is seen as in a black and white photograph, is rare, the condition of partial blindness to some colors certainly affiicts more than ten million American people. Every eighth man in the United States [1] who is a poten-

[1] With the exception of New York City; the color-blindness incidence for Jews is but one half that for the average American population. The percentage is known to be much less for women than for men so we should also exclude matinee audiences.

tial playgoer in the theatre and motion picture is seeing the colorful performance in an imperfect and peculiar fashion. It is certainly worth examination to see just how our carefully colored, lighted and costumed shows appear to them.

These figures may seem high but the evidence is overwhelming. Clements, Waaler and Von Planta altogether tested over eleven thousand European and American white males with the uniform finding of an 8% "color blind" index, to which an additional value of at least 50% must be added to account for the "color weak," or those whose deficiency is not sufficient to be detected by the rough scales necessarily used for mass-testing. Too, we must remember that many color-deficients do not know that their perception is different, believing simply that they haven't caught on to the admittedly bewildering customs of color-naming while some hold to the self satisfying theory that "everybody's out of step but father." And those who are aware of what they believe to be a serious misfortune frequently develop most ingenious devices to cloak their deficiency.

The term "color-blindness" is misleading, of course. Few of these ten million people are blind to *all* color, — many of them respond feebly to red and green so that they live in a world of ochers, whitish greens and blues; a few probably detect no yellow or blue at all; for some there are no purples; many partial or intermediate types are known, while others live in chromatic worlds which we have no way of certainly describing.

With today's theatrical resources in colored lighting, our emphasis on color in costumes, makeup and scenery, the striving for "effect" and "effects" on the stage, and the advent of the "natural" color motion-picture, we should try to ascertain how all this appears to the color deficients in the audience.

A picture in the hues actually seen by the color-blind would probably amaze us. The vision of the most common, the protanopic type, for instance, is characterized by a shortened red end of the spectrum. Consequently a crimson dragon on a black kimono would be invisible to them. Bakst's beloved combination of orange, magenta and emerald green would probably appear to a protanope as dull yellow, deep blue and olive. It is reported that "tritanopes" see no blue and distinguish yellow from red only by a difference in texture—yellow objects might have a fine granite-like pattern. Total red-green blinds see the entire stage show in a black-white series tinted with yellow and blue.

One important certainty is that, on the whole, tints and shades suffer the most distortion; pink and pale green may both appear light blue; and it is understandable that certain browns may appear dark green or a muddy purple; dull and soft shades tend to "go over" into apparently unrelated colors more often than do hues shown in full strength.

Evidently a color-by-color analysis gives us no clues to the situation beyond a realization of the limitations and irregularity of color-anomalous vision. Let us try to systematize the data from another standpoint.

Color as purposively used in the stage performance is usually intended to achieve 1, *harmony* by inter-relation of hue, 2, *atmosphere* and *mood* in which the effects are dependent upon the individual's association of previously experienced emotions with memory-images from nature, and 3, dramatic *stimulation* by means of deliberately affective and exciting combinations of color designed to intensify the significant elements of the play.

In regard to the harmony we may be prepared to find a strange thing. The subtle combinations the designer has so carefully chosen will never be seen by the color-blind, but it is probable that in their stead other color-harmonies, perhaps equally satisfying, will be set up. Some inner relationship seems to prevail.[2] This is suggested by the "copies" of paintings made by the color blind which are very different from the originals, peculiar, but harmonious; it seems likely because their judgment so often agrees with ours in the matter of what color combinations are "beautiful" and which are unsatisfying. But the *intention* of a given combination is probably often lost on them because of the hue-distortion which is inherent in their vision; an intention to suggest delicacy, sumptuousness, coldness, virility, "bloodyness," "tropicalness" and so on, may convey no such precision of meaning. By analogy, there are too few notes in their color scale to build up complex chords.

With the usual mood effects which spring from nature the case is probably different. If the designer has planned truly, selecting the significant color effect which epitomizes the mood he must convey, — say the essential quality of moonlight, of sullen sunset clouds, of pale lemon sunshine through lace curtains, of rotting red tene-

[2] The explanation for this rests upon theory; it is assumed that any type of retinal-neural system must achieve a balance which is "white." By Munsell, and others, this same balance upon a neutral axis is considered essential to the sensation of harmony.

ment bricks, of the lushness of tropical colors, — there is bound to be a recognition of these stigmata which will call up the desired emotion in normal and color deficient alike. It is here of no importance exactly how lustrous emerald palm fronds appear to the color blind; a repetition of the phenomena will evoke the corresponding associations. But it must be noted that if the essential quality is not *precisely* counterfeited distortion may prevent the color-blind catching the cue even when the normal will subconsciously accept the suggestion.

As for the dramatic stimulation afforded by interpretive and symbolic color combination, the suggestions of conflicts, of contrast, of loyalties, of building to climaxes, — they must be simple, vigorous and decisive. Only to the extent that they are bold are the cues most likely to be caught by the color-deficient; some will always be unseen by certain types of color blinds; and attempted subtility can only lead to misinterpretation by all types. The designer who hesitates between colors has lost the appreciation of the color-blind and many normals as well, for it must be remembered that there are always those in the audience who are *emotionally* color-deficient.

To the designer, then, this picture of a world in which nearly a tenth of our audience lives suggests a re-emphasis and *extension* of the old adjurations of dramatic production, — in design, be bold, be definite, be strong; be true to nature; but heighten, intensify, and vivify the significant in nature; choose symbols and suggestions from those experiences which are most common to all men. Thus by aiming at the color-blind the play will be benefited.

CARNEGIE EXPERIMENT: (1914 - -)

BEATRICE LEWIS

IN the years since 1914, the American theatre has grown from a European tributary to a capital theatre in its own right. In this same period, the experiment in drama training at Pittsburgh's Carnegie Institute of Technology has attained maturity.

It is no mere chronological coincidence that the development of the Carnegie Drama Department has paralleled American theatre development since 1914. Although our theatre eminence today may be due in part to the suppression and deflection of creative energies abroad, for the rest, for the far greater part, we can look to the dramatic resources of our own country — to groups like the Wash-

ington Square Players and the Provincetown, to schools like Yale and Carnegie Tech.

On April 23, 1939, the Carnegie Drama Department celebrated the 25th anniversary of its own birthday and the 275th anniversary of Shakespeare's with a production of *Julius Caesar*. In commemorating its first quarter century, the school commemorated twenty-five years of vital and far-reaching service to the national theatre community. The history of the school is more than an account of academic progress. It is the history of one of the prominent forces in the shaping of the American stage.

Twenty-five years before, on April 23, 1914, the Carnegie Drama Department had raised its curtain on Pittsburgh and the world with its production of *Two Gentlemen of Verona*. A few months later, the world was to be at war. But in the beautiful brand new Carnegie Theatre, the eighteen charter dramats and their faculty were engaged in the arts of peace. They were launching not only their first production; they were launching an experiment in theatre training that was unique both as an academic project and as an approach to the stage.

Not only the Drama Department but the whole School of Applied Design, as the College of Fine Arts was called in those days, was a radical deviation from the conventional approach to art. Prior to 1912, America had no art school like it. In that year, three men from Pittsburgh met in New York to discuss the founding of just such an art school as one of the group, Major Henry F. Hornbostel, had dreamed of ever since his years as a student architect at the École des Beaux Arts in Paris. Behind the conception stood Carnegie's first president, the broad-visioned Arthur Hamerschlag. In collaboration with Director Hamerschlag, Major Hornbostel had already broken ground for an art division at the school with a department of printing and commercial illustration. That beginning they proposed to expand into a five-fold art school with departments for each of the five major arts.

Trustee Charles Taylor accompanied Hornbostel to New York for the interview with Andrew Carnegie. The plan for a school that would pioneer in embracing all major expressions of the fine arts appealed to Carnegie as a practical means of extending his patronage of art and learning. He told Hornbostel to go ahead and draw the plans.

The College of Fine Arts was no sooner established than it became a focal point of American academic interest. Hornbostel's

idea — to create a school that would house all the arts in one building, that would be co-educational, that would implement inspiration with a sound craft basis — was an idea to stimulate imitation. Academically, it provided a dynamic new scholastic pattern; artistically, it helped to revitalize the whole sluggish art tradition. For once in a way, a perfectly respectable and distinguished American college — a college moreover dedicated to the American ideal of technological development — defined the study of art as a dignified practical pursuit neither bohemian and dilettante on the one hand, nor remote and academic on the other.

If the school's emphasis on craftsmanship was a novel approach to art in general, even more unconventional was its specific attack on the theatre. The man chiefly responsible for that attack was the first Drama Head, Thomas Wood Stevens. In 1913, Hornbostel, who had become consulting dean of the college, and Russell Hewlett, its gifted director, invited Stevens to come to Tech to work out a plan for a school of stagecraft. In evolving his plan, it was his job to create nothing less than a precedent and to do so within the limitation of certain inescapable regulations. There were the state requirements to meet in establishing a fully accredited college course in drama leading to a baccalaureate degree. There was also Carnegie's own restriction that the curriculum of each department in the Institute be one-third cultural, one-third technical, one-third scientific.

Originally, the department had been conceived in a purely technical configuration with chief emphasis on stage lighting, construction, design. Stevens' first step was to revise that point of view, to broaden the department from a school of applied design in the theatre to a school of the arts of the theatre. His biggest problem was to co-ordinate technical education with related work in the humanities. For the first time on record, student actors, producers, costumiers, scene designers and technicians were to combine with their technical groundwork a liberal arts education.

The only adequate models at hand were the already functioning departments of Architecture, Painting, and Music. As the parent department, Architecture provided a pattern of sober professional training which focussed primarily on its own field but which never lost sight of its cultural associates. As Stevens himself wrote five years later, "Our plan was not a brief and violent charge upon the subject, but rather a sustained siege. Architecture, painting, and music were already housed when we began to work and from time

to time, we borrowed from all of them. We could not have designed a better environment in which to build a new school devoted to the arts of the theatre."

Stevens took his plan to the country's leading actors, playwrights, critics. Otis Skinner spoke for all when he said, "It's *all right,* laddie, if you can make it work!"

The years since 1914 have answered Skinner's doubts. What Stevens produced was an original design so flexible and based on such a broad grasp of artistic realities that except for minor modifications it is as valid for 1940 as it was for 1914. Stevens was engaged in no mere sloganizing when he wrote, "Our plan is not a brief and violent charge . . . but a sustained siege!"

The Department moved into its newly completed quarters in the Fine Arts Building in February, 1914. The first eighteen students who appeared were accepted and production date was set for Shakespeare's birthday, April 23. From the top floor of the building, the painting department came down in squads to do the sets. Among them was a recent graduate in Illustration, the young Woodman Thompson, who designed for *Two Gentlemen* and who was, a few years later, to design for Broadway.

With this first production, the Carnegie Drama Department swung into the spirited prolific routine which has continued without interruption ever since. What changes have been made in Stevens' original curriculum have been prompted by the growing necessity for new dramatic opportunities outside the commercial theatre. Today, increased emphasis is placed on the master-of-all-trades requirements of the teaching and community theatre fields.

Another modification since the first days is the series of admission try-outs designed to eliminate the stage-struck from the stage-talented. Students must show imagination, capacity for hard work, a natural theatre endowment. With these reprequisites, plus a high school or equivalent degree, the applicant is eligible to become a Carnegie Tech dramat.

Tech dramats are as hard working a lot as you'll find on any campus in America. Unlike the average liberal arts collegian who can take his work or leave it, the Tech dramat is impelled by his own ambition to make the most of what his school has to offer. He is not fond of academics but he submits to English, modern languages, histories of art and civilization, psychology, aesthetics. If he is an acting major, he may not delight in the long hours on crew but he works as though he does. In the same way, production majors

and playwrights accept the acting requirements although they may never intend to appear on the audience side of a stage. Youngsters whose idea of a theatre career is an option in Hollywood either abandon that idea or leave Tech.

Rehearsal and performance, required for all four years, begins with elementary pantomime, improvisation, characterization. Sophomores become members of a repertory company from which all major productions are cast. Major productions rehearse five weeks, give eight to twelve performances. Rotation of faculty directors, each with his individual style, provides breadth and variation.

While students are appearing in productions, they take, in addition to their more purely academic courses, Make-up, Stage Craft, The Theatre, Dramatic Literature, Eurhythmics, History of Costume, Stage Projects, Fencing, Voice and Speech, Electricity and Lighting, Stage Design.

Foundation for all majors is the crew work traditionally divided into scene construction for men and costume making for women. Men build and handle sets, properties, lighting equipment. Freshmen do only the heavy apprentice work in carpentry and electricity. Specialization begins in the sophomore year with each specialty lasting the run of the show. Assignments are rotated so that everyone turning, design, technical direction, bookholding, ushering, house lends a hand at some time or other in props, painting, lighting, cosmanagement. By graduation, a dramat will have filled at least three assignments in each field.

Because of the heavy annual production schedule — eight major productions and any number of studio shows — backstage work at Tech is bound to heighten ingenuity and resourcefulness. For the Tech crew no play is too pretentious. They have surmounted almost every type of production problem from a simple lighting maneuver to such an elaborate artifice as the scene in *Kismet* where girls were apparently swimming in a tank of water.

While boys set the stage, girls dress the cast. Included in the Department's collection of three thousand costumes is the Richard Mansfield collection, given to the school after his death by Mrs. Mansfield. Even with this wardrobe, however, new items are needed for every show. No attempt is made to turn out finished garments. Dramats work for theatrical effect in terms of color, line, originality, period authenticity.

More and more the traditional divisions of labor are being discarded. For the past few years, freshmen have experimented in

exchanging provinces. While boys made costumes, girls built scenery and ran shows.

Most exacting of the Department's undergraduate requirements is the Senior Thesis. No mere term paper or academic dissertation is this stringently specified and somewhat monumental achievement. Rather, it is a complete prompt book for a hypothetical production of a standard play. It consists of an essay on the problems involved in the production, of a director's script, of carefully rendered scene and costume designs, of detailed floor plans and light plots, of additional discussion concerning whatever particular literary or technical interest the play might have. It is the practical culmination of a dramat's college career. To complete it, he must draw upon his entire course.

The real life of the Department is lived in Hornbostel's theatre. When this theatre was built, it was one of the most charming and best equipped intimate playhouses in the country. Today its equipment no longer ranks first but its charm is unimpaired. With its gray-toned murals framed by blond wood panelling, it is a place of elegance and distinction. Although its elliptical plan hampers vision in the side sections and in the picturesque half balconies along either wall, audiences, coming year after year, make their peace with its inconveniences for the sake of its all-pervasive sense of theatre.

In this playhouse over five hundred plays have been staged. The list of titles alone is a brilliant panorama of the world's dramatic literature. What Tech asks of a play is that it be worth doing as a première or as a revival, that it provide acting and production opportunities for a large number of students, that it teach some distinctive stage lesson, that its royalty be within the Department's budget.

Except for two departmental traditions, the schedule balances between light shows and heavy, between the style of one period and the style of another. Each year a Shakespeare title is added, and almost every year there is a Greek classic. Some of the school's most stirring spectacles have been the *Oedipus* of Sophocles, the *Agamemnon* of Aeschylus, the *Media* and *Electra* of *Euripides*.

Coriolanus, staged in April, 1940, was the school's twenty-eighth Shakespeare. In America, this record has been topped only by the Pasadena Community Playhouse. But what is most notable about the Shakespeare tradition at Tech is not the numerical record; it is the style and quality of the productions themselves. Unlike many groups which regard Shakespeare as either a venerable chore or a kind of actor's teething-ring, Tech regards him as a perpetually fresh adventure in dramatic art. In part, this attitude is accounted

for by the school's basic artistic sincerity. It is also accounted for by the fact that early in its history, Carnegie had the fabulous good fortune to provide a workshop for two of the world's foremost Shakespeare authorities — William Poel and B. Iden Payne.

William Poel's contribution to the Elizabethan album at Tech was not Shakespeare but the second production the world has ever seen of Ben Jonson's *Poetaster*. Poel, who had founded the Elizabethan Stage Society in 1893, came to Tech in 1916. For his production of *Poetaster,* he masked the proscenium arch with drapes, set his stage with a scattering of old English chairs, provided approaches at either side and at the rear so that one group might enter as another went off. Lines were read with stress only for particular points while the rest, run off like a treble trill, must have created the pianistic effect of arpeggios against a melody in chords. This, he maintained was the way the Elizabethans "tongued" their prolix dramatic verse. To those with an alert ear, it was startling but not without charm.

Poel inaugurated the Elizabethan stage at Carnegie but it was B. Iden Payne who adapted that stage to its modern practical application. Payne, who was eminent in England as an actor and as the founder of the Manchester School for Playwrights, came to America as Charles Frohman's producer in 1914. In 1915, he visited Tech as guest producer. Thereafter, except for a five-year interlude, 1924 to 1929, when he was Department Head, he continued his policy of visiting the school each year for the Shakespeare and generally, for one other show. In 1934, while he was directing at the University of Iowa, he was appointed to head the Shakespeare Memorial Theatre at Stratford.

In 1926, he tried out his modified Elizabethan stage with the production of *Hamlet*. Pittsburgh still cherishes the memory of that production — as much for its experimental success as for Hardie Albright's distinguished performance in the title role. No scenery was used and only a few pieces of furniture. Mid-center on the stage was a structure consisting of a roof or canopy supported by two columns. The space inside the columns formed the inner stage or alcove concealed by a curtain. Actors played within the alcove, before it and occasionally on a kind of balcony above. By continuous action, Payne retained the unbroken rhythm essential to the full appreciation of Shakespeare's rational progression of scenes.

In addition to Shakespeare and the Greeks, Tech has chosen from around one hundred of the world's greatest writers for the stage. British choice has ranged from the unknown author of

fifteenth century *Everyman* to the very well known author of twentieth century *Hay Fever*. More than thirty British writers have been represented and there have been almost as many Americans. Tech has done plays by Marlowe, Sheridan, Galsworthy, Barrie, Shaw, Rice, Howard, O'Neill. It has done Irish plays by Dunsany, Robinson, Synge; French plays by Molière, Racine, Brieux, Rostand; Russian plays by Andreiev, Tolstoy, Tchekov; Italian plays by D'Annunzio, Pirandello, Giacoso; German plays by Hauptmann, Toller, Schnitzler; Spanish plays by Calderón and Lope da Vega.

For intrinsic interest, for unforgettable productions, certain events stand out. Payne's production of *The Silver Box* made news when Galsworthy came to Tech for rehearsals and the opening. E. W. Hickman's thrilling production of *Man and The Masses* by Ernst Toller is said to have stirred the entire student body at the Institute more than any other recent play. Glowingly audiences recall *The Life of Man* by Andreiev, *The Playboy of The Western World* by Synge, *Ticket-of-Leave Man* by Taylor, *Hobson's Choice* by Brighouse, *Time and The Conways* by Priestley, *Alison's House* by Susan Glaspell, *Shakuntala* by Khalidassa, *The Tidings Brought to Mary* by Paul Claudel.

There have, moreover, been some twenty-five premières of plays by authors outside the school and some seventy test stagings of plays by students in the Department. Occasionally, students take matters into their own hands and draw from all departments in the Art School for such delightful productions as *The Gondoliers,* the Scotch and Soda reviews, the *Persephone Ballet*. This last was an original composition by Earl Wild and George Youngling of the Music Department. Dramats staged the dancing. James McNaughton of Architecture did the sets.

No such record of productions, no such course of scholastic progress could have been achieved without the guiding gifts of the school's teachers and department heads. The early group — Hornbostel, Hamerschlag, Hewlett, Stevens, Payne—endowed this theatre department with creative vision in the grand manner. Those who followed sustained the original pace.

In Chester Wallace, who taught at the school from 1919 until his death in 1939, Tech had the kind of spirit that gives lilt and color to any adventure in art and education. Nostalgically, graduates recall his perennially youthful exuberance and buoyancy, his vast sympathy, his rich store of sentiment, his ineluctable sense of comedy. On stage, he galvanized his players with his feeling for theatre and his amazing energy and pace.

In 1931, Elmer Kenyon came to head the Department. He came at a time when financially and psychologically, the school was going through the leanest period it had ever known. Kenyon's austere sense of values based on his encyclopedic theatre background filled a tonic need. He broadened the curriculum and provided for increased emphasis on preparation for fields outside the constantly narrowing commercial theatre.

When Kenyon returned to his former post with the Theatre Guild in 1936, he was succeeded by Henry F. Boettcher, then instructor at Allegheny College and alumnus of George Pierce Baker's "English 47." A scholarly executive, a theatre director of force and distinction, Boettcher, like Kenyon, believes that the theatre worker in these years must be prepared to meet disappointment in the commercial field with the initiative and resource to stake a claim west of Broadway.

Rotating with Boettcher on productions are Douglas McClean, Mary Morris, Thomas Job. Douglas McLean was formerly director of the community theatre in York, Pennsylvania. Mary Morris has acted on stage and screen, notably in *Double Door* and *Victoria the Queen,* and is a member of the Council of Actors' Equity. In Thomas Job, who joined the staff this fall, students have a teacher of playwrighting who is himself a working and successful playwright, author of the dramatization of *Barchester Towers* which was produced several seasons ago with Ina Claire.

George Byron Kimberly, Technical Director, and his wife, Elizabeth Schrader Kimberly, Costumière, are themselves graduates of the Department. Other members of the faculty are Lloyd F. Weninger, Instructor in Scene Design; Edith Warman Skinner, Instructor in Diction; Margery Schneider, Instructor in Eurhythmics.

From 1931 until 1939, when she left to teach at the American Conservatory of Music, Cecil Kitcat taught Dalcroze Eurhythmics and assisted in the staging of productions that required choric formations and movement. Literally a creative dynamo, she staged her choruses with electric vigor and precision. E. W. Hickman, alumnus of Tech and of the American Academy of Dramatic Art, was on the Tech faculty from 1929 to 1940. He left behind him a succession of productions that would honor the record of any producing organization in the country.

From time to time, celebrated visitors have come to do guest productions. Donald Robertson, who directed the opening *Two Gentlemen of Verona* and later, *Tartuffe,* was the first. Francis Powell directed *School for Scandal,* Whitford Kane staged *Lone-*

some Like, Lennox Robinson and Padraic Colum produced Abbey Theatre plays, Boris Glagolin did several productions in the expressionist manner. Others more or less permanent were Albert Lovejoy, Frederic McConnell, Hubert Osborne, Clifford Brooke.

In this school, under this faculty have studied six generations of Carnegie dramats. In Stevens' day, there were usually 50 enrolled. During the depression, enrollment mounted to between 120 and 150 and the school's traditional double casting became triple casting to give everyone a chance on stage. Currently there are around 100. Teachers feel that between 80 and 90 is ideal.

In some ways, Tech dramats are like college students anywhere. In most ways, they are a community unto themselves. Theirs is the solidarity that is bound to develop in any group associated for four years in the high tension activity of the theatre. Because of it, the Department is a little apart not only from the rest of the world but also from the rest of the school.

With their talent for self-projection, dramats are likely to appear a shade more uninhibited than the average undergraduate. But whereas the common campus variety of college student resorts to primitive group noises, dramats express their feelings with parodies of everything from *Macbeth* to *The Mikado.* There is, however, little time for off-stage pyrotechnics. Anyone yearning for self-expression has ample opportunity in the Department's ordinary course of events.

What is perhaps most outstanding about the dramat is his inflexible professionalism. Nothing annoyed B. Iden Payne so much as hearing his students called amateurs. To him they were apprentice actors even more exacting in their attitude toward the stage than an established player earning his living on Broadway.

Of the two thousand or so students who have been graduated from the Department, around thirty-five percent are acting on stage and screen, twenty percent are in radio, twenty percent are in production work, twenty-five percent are teaching.

In community theatres are Frederic McConnell, who took a nucleus of Tech graduates to Cleveland to found the Cleveland Playhouse; Charles Meredith, who left the Dallas Little Theatre to direct that magnificent government restoration, the historic Dock St. Theatre in Charleston; Bernard Szold, who heads* Le Petit Thèatre du Vieux Carré of New Orleans. In education are Arleigh Williamson, Speech Department Head at NYU; Howard Southgate and

* Mr. Szold is no longer with Le Petit Thèatre du Vieux Carré. (Ed.)

Harold Schaughency, also at NYU; Lee Mitchell at Northwestern; Dr. George Kernodle at Western Reserve; Lucy Barton, author of *Costuming the Biblical Play* and *Historic Costume*.

On stage have played Kay Duncan and John Thomas (*The American Way*); Carl Benton Reid (*The Little Foxes*); Maury Tuckerman, Irene Tedrow, Arthur Kennedy with Maurice Evans; Thelma Schnee with the Lunts. Kennedy, by the way, recently appeared in the James Cagney film, *City For Conquest*. Also in Hollywood are Hardie Albright, actor and playwright; Herbert Polesie, director; Arthur Lubin and Norman Foster, actors; Kenneth Thomson, secretary of the Screen Actors' Guild.

In radio, Lloyd Yoder is NBC's San Francisco manager; James Church is play director at NBC in New York; James McNaughton, formerly chief designer for the Steuben Glass Company, is television designer for RCA; Earl Wild, who wrote the "Persephone Ballet," is staff pianist at NBC. Coast-to-coast broadcasters are Howard Claney, Bess Johnson, Margot Dee, Dorothy Neumann, Carlton Young.

Not easily classified are Vernon Crane — actor, press agent, writer — who was stage manager for Maurice Evans; Franklin Heller, stage manager for *The American Way*; Robert Gill, former announcer at WCAU in Philadelphia and current member of the staff of the Cleveland Playhouse as winner of the Rockefeller Foundation Award. William Bales, who took drama to advance his dancing, dances with the Humphrey-Weidman group and teaches at Bennington.

If the Department, with its constant stream of graduates and its contribution to the whole system of theatre training, has served the national community, it has also served its home community. Faithfully, year after year, the Department provides Pittsburgh with a repertory theatre that would grace the cultural life of any city in the country. The community as a whole takes its good fortune for granted. The local press confines its recognition of the school chiefly to announcements of production openings. Yet out of the seven hundred thousand people in Pittsburgh there is a small but ardent fraction who cross the campus cut in any kind of weather, who will, if they haven't been able to get tickets, stand in line from seven o'clock on in the hope of a vacant seat. For despite the general local apathy, Carnegie is always sure of a full house. Hundreds have discovered that throughout the years, this playhouse has given its audiences a consistently high standard of performance and a liberal education in the technique and literature of the stage.

PERSONALITY TRAITS OF DRAMA SCHOOL STUDENTS

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DURING the past ten years the writer has frequently received the impression that lay people held rather definite attitudes toward Drama School Students. Furthermore, students of a university, not long after matriculation, would apparently begin to discover peculiarities in the behavior of classmates who were registered in the drama department and thereafter were not averse to referring to the "dramats" as individuals possessing characteristics quite different from themselves. "They're all a bunch of queer ducks," was the manner in which one student classified the students attending drama school.

"They constantly annoy you," was the reaction of an engineering student to the writer's query. "The trouble with them is that they don't know when to stop acting. I don't mind what they do up on the stage — in fact I admire them then — but when the show is over I expect them to stop acting, come back to earth and be human. Instead, they float about the campus wearing loud clothes, and every time they pass, they look at you as if they expect a round of applause. I think that in the final analysis they're a group of egotists."

Another stated, "Every fellow and girl I know in the drama school is an out-and-out exhibitionist. All they talk about is themselves."

"They don't face the facts. I don't know whether it's because their minds are taken up with learning parts all the time, or what it is — but they seem to pay little attention to what's going on about them. If you attempt to discuss national affairs or economics with them, before very long you'll be surprised to discover that they've switched the subject to a discussion of how good they were in their last role; how beautiful their voice is becoming and how audiences are taken with their charming personalities," was the opinion of still another non-drama student.

Fellow students were not the only ones so to express themselves. Similar attitudes were encountered in instructors who have Drama School students in their classes. Drama department students, according to many of these instructors, are emotionally maladjusted or socially unadjusted.

A third group of individuals who appear to have definite attitudes toward the Drama School Students are the "little theater devotees." During years of participation in little theater activities the writer on many occasions heard amateur actors and actresses refer to the university Drama School Students as "phonies," "pansies," and "pseudo-Bohemian show-offs." It is possible, of course, that to a certain extent these remarks were caused by jealousy. Amateur performers are often daytime clerks or stenographers unable to afford a college education and the only active outlet for their interest is in little theater organizations, which are usually meagerly equipped and poorly subsidized. Quite naturally envious comparisons with college drama students then do arise.

In direct negation to the attitudes of the non-drama students, instructors and little theater participants, Drama School instructors usually find nothing unusual in their charges. They maintain that their students possess no abnormal traits, that they conduct themselves in the usual collegiate manner, and that as in the average cross-section of students there are intelligent ones, retarded ones, amenable ones, and disagreeable ones, but that there is nothing about Drama School Students as a group which may be considered eccentric or atypical.

There are few investigations of Drama School students recorded in psychological literature. Carroll H. Miller of the State University of Iowa in an investigation of the value of standard tests for a study of dramatic talent among high school students, makes the following comment:

> On the Pressey X-O Test there is some suggestion that the more talented group is less concerned with morality of a personal, conventional sort. And one cannot help recalling here the long feud between the theater and Puritanism. Test II results, the 'worries' part, give a little more definite indication of tendency. The character and the number of the words crossed out suggest strongly that the superior group is the more maladjusted — have more "anxieties" — perhaps are a little neurotic. This of course is no new idea. For years we have heard of "artistic temperament" in popular discussions of actors.[1]

The indications are then that there is a definite point of view towards Drama School students; namely, that Drama School students possess unusual personalities and that their attitudes and conduct are decidedly atypical.

The purpose of the present study was to determine by means of

[1] Carroll H. Miller: "Value of Certain Standard Tests for a Study of Dramatic Talent." *J. Soc. Psychol.*, 1938, 9, 437–449.

standardized personality schedules and a questionnaire designed especially for the purpose, whether or not Drama students have unusual personality traits — in so far as such trait differences may be revealed by these devices.

In addition the study endeavored to gather data which may throw light on the origin of unusual conduct on the part of Drama School students, should such be found.

If Drama School students do possess discernible eccentricities, what are their causes? What is the relationship of fortunate or unfortunate family backgrounds to the selection of the theater as a career? What influences are important in the selection of the theatrical career? Is there a relationship between early emotional experiences and the choice of this same profession? Are Drama School students aware of the charges of "exhibitionists," "egotists," and "queer ducks" applied to them by non-drama individuals?

The subjects of this study, Drama School students, are understood to be students enrolled in a college or university dramatic department for the purpose of receiving dramatic training, technical theatrical instruction and stage apprenticeship, and are to be clearly distinguished from college students merely participating in dramatic activities.

There were two such schools available in Western Pennsylvania, both located in the city of Pittsburgh; the Duquesne University Drama School and the Drama School of Carnegie Institute of Technology. From Duquesne University Drama School the entire present enrollment of students was used, a total of 40 students; 24 women and 16 men. From the Drama School of Carnegie Institute of Technology 40 more students were obtained, 22 being women and 18 men.

The writer chose, because of their appropriateness to this study, the following named schedules: the Willoughby (Clark-Thurstone) Personality Schedule,[2] the Allport-Vernon Study of Values,[3] the Neymann-Kohlstedt Diagnostic Test for Introversion-Extroversion,[4] and the Drama School Questionnaire. The last named, a questionnaire designed especially for Drama School students, con-

[2] Raymond R. Willoughby: "Norms for the Clark-Thurstone Inventory," *J. Soc. Psychol.*, 1934, 5, 91–97.

[3] G. W. Allport and P. N. Vernon: "A Study of Values." *J. Abn. and Soc. Psychol.*, 1933, 26, 231–248.

[4] C. A. Neymann and K. D. Kohlstedt: "A New Diagnostic Test for Introversion-Extroversion," *J. Abn. and Soc. Psychol.*, 1928, 23, 482–487.

tained 52 questions pertinent to the conduct and attitudes of those preparing themselves for the theatrical profession. Since this was the only one of the four personality schedules given that had not been standardized, it was administered to a control group of 80 non-drama students, 27 being from the University of Pittsburgh —10 women and 17 men, and 53 from the Duquesne University—11 women and 42 men. These were unselected subjects registered at their universities in widely divergent fields — pre-medical, pre-dental, social work, pre-law, nursing, business administration, teaching, journalism, advertising, research, and so forth.

Directions for the personality schedules as prescribed by their authors were adhered to in all instances. The tests were given to groups of students in the classrooms of the respective universities. It was explained to the subjects that the tests represented personality inventories, and that if they so wished they could leave their names off the tests. On the other hand, the writer expressed a willingness to go over the results of the scores made by those subjects who would want this service. Seventy-eight out of the 80 drama school students thereupon wrote their names upon the schedules and requested an opportunity to analyze their scores. Seventy-one out of the 80 non-drama students wrote their names upon the Drama School Questionnaire.

In view of the fact that the Willoughby (Clark-Thurstone) Personality Schedule was standardized on college students by the originators of the test, the writer used these norms for comparison with the scores made by the Drama School students, assuming the norms to be characteristic of average Non-Drama School students. Two hundred and sixty-seven subjects from Dartmouth University, Clark University, University of Buffalo, and the University of Pittsburgh were used in determining Willoughby's norms. The results of this comparison are given in Table I where it may be

TABLE I

COMPARISON OF MEANS ON THE WILLOUGHBY (CLARK-THURSTONE) PERSONALITY SCHEDULE OF DRAMA SCHOOL STUDENTS AND WILLOUGHBY'S STANDARDIZATION GROUP OF COLLEGE STUDENTS

Mean of Drama School Students	Mean of Non-Drama School Students	Difference	P.E. of the Diff. in Means	C.R.
37.09	32.5	4.59	1.22	3.76

noted that the Drama School group averages higher in this trait than the norms. The conclusion that Drama School students are more neurotic than other college students is, however, hardly warranted since the difference is not statistically reliable. Though the critical ratio is 3.76 and the chances of the obtained difference not being a true difference is only .0126:1, the general statistical rule is that a statistical constant is not significant unless it is at least four times its probable error.

The Allport-Vernon Study of Values Test aims to measure the relative prominence of six basic interests or motives in personality: the theoretical, economic, aesthetic, social, political and religious. The classification is based on Eduard Spranger's *Types of Men*,[5] a work which defends the view that the personalities of men are best known through a study of their values or evaluative attitudes. Gordon W. Allport and Phillip N. Vernon expressed their belief in this same point of view and in this test they have attempted to show that even the common situations of everyday life give rise to evaluative judgments. They say, for example, that one may look at a wedding ring and regard it as an object that is glittering (an aesthetic evaluation), as made of 14 carat gold (theoretical evaluation), as a marketable object (economic evaluation), as a symbol of loyalty and love (social evaluation), as an emblem of rights and duties (political evaluation), as an object with sacramental and mystical significance (religious evaluation).

In Table II the means earned on the six value aspects of this test by our Drama School students is compared with the mean obtained by a group of 84 Franklin and Marshall College students, to whom Paul L. Whitely administered the Study of Values test.[6] The major intellectual interests of these subjects in college were: 26 in natural science; 15 in social science; 20 in business and 26 in arts and literature.

Reference to Table II indicates marked differences between the means of the two groups. Outstanding is the fact that the Drama School students made an average score for the Aesthetic Interest which was 10.26 points higher than the mean of the Franklin Marshall College students. This difference is statistically reliable, since the difference is much more than four times its probable error.

The difference between the two groups in respect to the Aesthetic

[5] Eduard Spranger: *Types of Men*. American Agent. G. E. Stechert, 1928.

[6] Paul C. Whitely: "A Study of the Allport-Vernon Test for Personal Values." *J. Abn. and Soc. Psychol.*, 1933, 28, 1–14.

Interest is so large that there is the possibility that it may have caused statistically significant differences in other parts of the test, for in addition to the Aesthetic Interest there are two more statistically reliable differences between the two groups of students. The Drama School students made an average score for the Theoretical Interest which was 4.16 points lower than the non-drama school

TABLE II

COMPARISON OF MEANS ON THE ALLPORT-VERNON STUDY OF VALUES OF DRAMA SCHOOL STUDENTS AND A GROUP OF FRANKLIN AND MARSHALL COLLEGE STUDENTS STUDIED BY PAUL L. WHITELY

Interests	Mean of Drama School Stud.	Mean of Non-Drama School Students	Difference	P.E. of the Diff. in Mean	C.R.
Theoretical	25.97	30.13	— 4.16	.72	5.77
Economic	24.95	30.40	— 5.45	.88	6.19
Aesthetic	37.48	27.22	10.26	.93	11.03
Social	30.39	29.14	1.25	.62	2.02
Political	30.57	30.00	.57	.75	.76
Religious	33.27	33.83	— .56	.96	.58

group. The critical ratio is 5.77 and so the difference may be considered reliable. In respect to the Economic Interest the Drama School students also made an average score 5.45 points lower than the Franklin and Marshall College students, and since the critical ratio in this instance is 6.19, the difference is considered statistically significant.

For the results of this test it may then be stated that Drama School students have a greater Aesthetic Interest and less Theoretical and Economic Interests than the comparison group of non-drama school students. A question to consider is whether this decided aesthetic evaluative attitude and the correspondingly low theoretical and economic evaluative attitudes on the part of the Drama School student accounts for the atypical characteristics ascribed to him? In reference to this question Allport and Vernon's description of the aesthetic individual may be considered significant. They say of the aesthetic:

> He sees the highest value in form and harmony. Each single experience is judged from the standpoint of grace, symmetry, or fitness. He need not be a creative artist; nor need he be effete; he is aesthetic if he but finds his chief interest in the artistic episodes of life. He agrees with Mencken that, "to make a thing charming is a million times more important than to make it true." [7]

[7] *Op. Cit.*

In accordance with the descriptions presented by the authors of this test, it may be stated that the Drama School student is likely to display valuative attitudes considered extreme in character when compared to those of his fellow non-drama school classmate.

The authors of the Neymann-Kohlstedt Diagnostic Test for Introversion-Extroversion believe that while introversion-extroversion is a normal character trait, certain types of insanity are typically introvertive and others are typically extrovertive.[8]

Table III gives the results of comparing the mean of the Drama School students on the Neymann-Kohlstedt Diagnostic Test for Introversion-Extroversion with the mean of 172 students of a

TABLE III

COMPARISON OF MEANS ON THE NEYMANN-KOHLSTEDT DIAGNOSTIC TEST FOR INTROVERSION-EXTROVERSION OF DRAMA SCHOOL STUDENTS AND A GROUP OF COLLEGE STUDENTS

Mean of Drama School Stud.	Mean of Non-Drama School Students	Difference	P.E. of the Diff. in Mean	C.R.
7.40	2.87	4.53	1.05	4.5

college population examined by Dr. Ross Stagner at Gustavus Adolphus College.[9]

The Drama School students have a larger average score than the comparison group and the difference is statistically significant. The mean of both groups, however, places them in the classification considered by the authors of the test as indicative of neither distinct introversion nor extroversion. From the results obtained on this test, it may be said then that the Drama School students tend more towards extroversion than the non-drama school group and that this tendency is a reliable one, although neither group of students may be considered technically belonging to the class of extroverts.

In constructing the Drama School Questionnaire psychological literature and personality inventories were combed for significant questions; that is, questions assumed by the writer to be pertinent to the conduct and attitudes of those in the theatrical profession. Although space prevents giving the answers to the 52 questions listed

[8] *Op. Cit.*

[9] Ross Stagner: "The Intercorrelation of Some Standardized Personality Tests." *J. of Applied Psychol.*, 1932, 16, 453–465.

in the Questionnaire, both the quantitative and qualitative responses of the Drama School students were highly illuminating as may be seen by the following three samples:

Question 12: What decided you to prepare yourself for this profession?

	Drama per cent	Non-Drama per cent	Diff.	S.E. of Diff.	R.
Influenced by school teachers	15.00	5.00	10.00	4.7	2.1
Influenced by parents or members of family	20.00	25.00	–5.00	6.7	.7
Influenced by members of the profession	10.00	8.75	1.25	3.4	.4
Self-realization of talent for the profession	52.50	12.50	40.00	6.7	5.9

"I have adored it always — it's in my blood."

"The way the theater stood out above the priesthood for me — knowledge of my fitness for study of the theater."

"I heard Hayden's 'Water Music' and saw Helen Hayes act the next day. I've never wavered since then."

"Always had a liking to be near the footlights."

"From the time I was old enough to go to the theater it was particularly fascinating, and I had a desire to become a part of it."

"Tried several other things, but couldn't keep away from it."

"The desire to show-off — consequently the drama."

"It was the only thing I wanted to do, and I wanted to do it terribly!"

"Because I'm not happy away from it."

Question 36: Do people consider you "a queer duck"?

	Drama per cent	Non-Drama per cent	Diff.	S.E. of Diff.	R.
Yes	53.75	7.50	46.25	6.7	7.5
No	46.25	92.50	–46.25	6.7	7.5

"I talk differently, act differently than most people I know. And for that reason they consider me a 'queer duck.'"

"Despite my interest in the theater I feel one must be a little 'batty' to spend one's entire life at it. The intense concentration on unreality demands a certain type of mind."

"Yes, by people who consider my actions purely as that of a dramat."

"All dramats are slightly eccentric, and I have inhibitions and often obey impulses."

"Because I become too absorbed in theater work and pay no attention to anything else. I'll work on stage to all hours of the morning to get a thing done right."

"People say they have never met anyone like me before. I'm not interested in what other people are. I love the theater so much. I'm always up or down and never have a neutral feeling about anything."

"I don't inhibit myself with friends. I tend to climb on tables and holler."

"Some people tell me I'm different, but they would not explain. I don't know why."

"Just because I'm a dramat, although I personally don't think I've let myself adopt some habits of the dramats."

"People in my own profession or in the arts don't consider me peculiar — people outside the profession don't understand my standard of values, impracticality, absent-mindedness, etc."

"My theory is that dramats live such an intense, unreal life, and work so hard mentally and physically, that when they relax they do it whole-heartedly and get very silly, very crazy — to sort of shake themselves back into a normal world. To keep their mental and emotional balance. People who don't lead such an emotionally stimulated life, can't understand this setting free of spirit, and why we do it, and call us 'queer.' Though it really keeps us from becoming 'queer.'"

Question 52: Do you have any bad personal habits which you believe you will have to break before you achieve distinction in your profession?

	Drama per cent	Non-Drama per cent	Diff.	S.E. of Diff.	R.
Yes	86.25	52.50	33.75	6.8	4.9
No	13.75	47.50	–33.75	6.8	4.9

If so, what are they?

"Stubbornness, inability to work with all types of directors. Must develop more faith in my own judgment. Must submit to tiresome exercises necessary for speech correction, etc. Forget acting as something sacred, and accept it as a commercial profession. Learn to select what is most important and not try to do each and everything that comes by — this leads to sloppy work."

"I have to learn theater discipline — not resent taking orders. I can't at present take criticism. When someone says something bad about my acting it just about kills me. I have a bad temper. I am impatient of actors who do not 'give to me' when I am playing opposite them on stage."

"Super-sensitivity to destructive criticism. Unethical discussion of fellow workers. Very quick-tempered."

"A tendency towards frankness. If a person says to me, 'He's good,' I'm apt to say, 'Frankly, I think he's putrid.'"

"I have not yet budgeted my time for intensive work. Have tendency to dissipate creative mood in trivial talk."

"Self-assurance, hating to wear costumes previously used, hating to stay up far, far into the night."

"The feeling that my looks will hold me back. (Silly, but true.) A lack of nerve, that is to push past an office boy or a secretary and barge into the producer's office à la Terry in STAGE DOOR. Getting angry at an actor who hogs. Feeling responsible for everyone, that is making sure that everyone else is all right or on time, etc. and sometimes neglecting myself."

"Unfriendly, reserved, aloof attitudes and a relaxation of inhibitions."

From the statistically significant questions noted in the Drama

School Questionnaire, a composite picture may now be drawn of Drama School students:

> The fathers of Drama School students are employed in the professions to a degree greater than the fathers of the Non-Drama School students . . . Drama School students experienced more periods of prolonged coldness toward members of their families . . . Drama School students decided to enter their chosen profession as the result of experiencing a self-realization of talent, while Non-Drama School students selected their future occupations after a survey of the other professions . . . Both at childhood and at the age of 16 the theater as a vocation made a stronger appeal to the Drama School students than did their respective professions to the Non-Drama School students . . . Beggars and panhandlers are more apt to find the Drama School students "easy marks." . . . A larger number of Drama School students admit to "showing off" at parties or gatherings than do their fellow students . . . More Drama School students believe that their work possesses a certain individuality by which it may be distinguished from others . . . More of them admit to having acted up in a silly manner . . . More of them tell themselves that people will have to get accustomed to them as they are . . . More people consider them "egotistical." . . . More people consider them "queer ducks." . . . More so than the Non-Drama School Students, they intend to leave definite instructions as to how they wish to be buried . . . More so than the control group they consider themselves attractive to the opposite sex . . . More Drama School students claim to spend much time analyzing themselves . . . In more instances than Non-Drama School students they believe they possess a natural talent for their profession . . . On the other hand, they are more often troubled with doubts as to their ability . . . More so than Non-Drama School students they maintain that all of their interests and activities are organized for the attainment of their professional goal . . . And lastly, they admit more than Non-Drama School students, to possessing bad personal habits which they believe they will have to break before they achieve distinction in their profession.

The sample statements of members of both groups show distinct differences in response. Although these differences in themselves are qualitative and are not measurable, when added to the statistically significant responses, they tend to define the drama student as a distinct and unusual personality.

This study indicates then that of the three standardized personality schedules administered to a group of 80 Drama School students, the Allport Vernon Study of Values and the Neymann-Kohlstedt Diagnostic Test for Introversion-Extroversion proved statistically significant. On the Drama School Questionnaire, an unstandardized schedule, which was administered to the group of Drama School students and a control group of Non-Drama School students, an item-for-item comparison of the percentage of responses

indicated marked differences in the personalities of the two groups in 18 out of the 52 questions in the schedule. In summarizing then:

1. There is a statistically significant difference between the mean of Drama School students and a comparison group of Non-Drama School students on the Allport-Vernon Study of Values Schedule. If we assume that this test really measures the six evaluative interests described by the authors, it may be concluded that because Drama School students score high in Aesthetic Interest and significantly low in Theoretical and Economic Interests, their personalities may be outstandingly distinctive and in marked contrast to those individuals scoring low in Aesthetic Interest and high in Theoretical and Economic Interests.

2. On the Neymann-Kohlstedt Diagnostic Test for Introversion-Extroversion the Drama School students showed a larger average score than a comparison group of college students. The difference between the two groups of students has statistical authority, and from the results obtained, it may be said then that Drama School students tend more towards extroversion than the Non-Drama group and that this tendency is a reliable one.

3. On the basis of the 18 statistically significant different responses made to the Drama School Questionnaire by the Drama School students and the control group, light has been thrown upon the questions posed at the beginning of this study. Though the actual causes of the distinctive behavior manifested by Drama School students must still remain largely a matter of conjecture, the results obtained on the Drama School Questionnaire show a statistically reliable connection between Drama School students and unfortunate family encounters, that Drama School students admit to the charges of "exhibitionists," "egotists" and "queer ducks" applied to them, and in general that Drama School students possess attitudes in direct contrast to that of the Non-Drama School control group used in this study.

4. On the basis of the evidence gathered in this study it would appear that there was justification in ascribing atypical personalities to the Drama School students. Behavior, which at the very least may be described as different from that of comparison groups of college students, was measured and found significantly outstanding in three out of the battery of four schedules administered to the students.

5. The writer wishes to venture the opinion that despite the indication that Drama School students possess extraordinary per-

sonalities, in all likelihood the unusual conduct and attitudes of Drama School students are largely affectations resulting from the peculiar socio-economic factors prevailing in their chosen occupation. The Drama School student is no doubt well acquainted with the fact that he is attempting to enter a highly specialized field, a profession which is extremely competitive and for which his chances of achieving success are totally unpredictable. In any practical field of endeavor the beginning worker may start as an office boy and ultimately work his way up to a vice president, but the Drama School student knows that such a condition is rarely found in the theatrical profession. Hard work and a regulation number of years of faithful application to one's duties will not necessarily mean success in the theater. There are too many well-known instances of the unknown, unwanted actor suddenly becoming famous overnight; there are too many instances of starving actors within a short period of time unexpectedly finding themselves possessed with great wealth.

During the past decade the legitimate stage in the United States has become more restricted than at any time in its enire history.[9] The Drama School student, accordingly, is acquainted with the fact that today there is no middle road of mediocrity in his field, and when he graduates Drama School, he will either establish himself successfully or become a hanger-on about Broadway. No doubt all this influences his daily thoughts and behavior, creates doubts as to his ability, or arouses in him a determination that is excessive when compared to the prospective members of other professions.

CONCLUSIONS DRAWN FROM THE INSTITUTES FOR EDUCATION BY RADIO

DONALD W. RILEY
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FOREWORD

THE following conclusions were drawn after due reflection over addresses and ensuing discussions of the 1937–8–9 Institutes for Education by Radio held at Ohio State University. They repre-

[9] Eugene Burr: *The Billboard Year Book of the New York Legitimate Stage.* The Billboard Publishing Company, Cincinnati, Ohio, 1938.

sent, in the writer's opinion, only those tangible conclusions upon which a general agreement was expressed. They do not cover all of the Institute addresses, discussions, or sectional meetings; being limited to those which the writer attended from beginning to end, and over which sufficient note of content was made to warrant drawing such conclusions.

GENERAL SESSIONS

I.

Education and Culture by Radio

A. That teaching is improved:
   1. Necessity for teacher to adapt material to the air:
      a. Eliminates non-essential content.
      b. Makes more interesting and vital that which is retained.

B. That radio must remember its responsibility as a social force in raising standards of national culture:
   1. Educational stations are naturally more aware of this duty than are commercial stations.
   2. British Broadcasting System probably adheres more closely to this aim than does the American system. (Conclusions drawn from address — Gladstone Murray, Canadian Broadcasting Corporation.)

II.

Educational Broadcasting by Educational Stations

A. That the general scope of material offered is rapidly expanding:
   1. For elementary education.
   2. For adult education.
   3. Evidence of this expansion found in the following:
      a. Radio Junior College idea is growing (Ohio State and Wisconsin are leading examples.)
      b. Number of hours on the air are increasing (vary at present from 2 to 12 hours per day with Wisconsin, Michigan State College, Iowa, Ohio State, University of Florida, Oregon State System of Higher Education, and Washington State College in the higher bracket.)

B. That the purely educational type program is given more attention than the more obviously entertainment type:
   1. Survey of 25 educational stations reveals a variance of from 50% to 90% in favor of educational type program.
   2. Consensus is that all program types should be, and are rapidly becoming, entertaining enough to hold interest without loss of educational values.
      a. Such trend will bring about desired closer cooperation between educational and commercial stations.

C. That Educational stations serve a distinct and unique purpose:
   1. Designed primarily to disseminate information, raise the level of public taste, and widen the scope of learning.

2. Wherever afforded adequate facilities, educational stations better serve this function because they are not hampered by the commercial station motive to sell time and talent to sponsors.

III.

Selection and Training of Radio Talent

A. That there is too little uniformity of method:
   1. Particularly true of high school systems in which variance is regulated by:
      a. Local views and facilities.
      b. Interest and ingenuity of principal or superintendent.
   2. Much of the training is offered as an activity, using a public address system rather than regular broadcasting equipment.

B. That much closer cooperation should be sought between the members of an educational station staff and those of the teaching staff who offer courses for academic credit.
   1. At present, too much time and energy is wasted in senseless bickering over individual advancement and prerogatives.
   2. No member of a broadcasting station staff (commercial or educational) should be given rank of university teacher unless that member meets the usual requirements and standards set up for faculty ranking.

IV.

Studio Techniques

A. That there is a vast field open for research in developing music, drama, and sound effects to a more satisfactory degree of effectiveness:
   1. Script writing:
      a. Practically any written composition in any field admits of adaptation to the air, and to date, comparatively few specific fields have been adapted.
   2. Technical aspects:
      a. Many engineering phases are scarcely tapped.
   3. Directing and acting:
      a. New techniques constantly appearing for trial as new devices for transmitting sound are discovered.

B. That commercial stations, educational stations, radio workshops, and courses for academic credit can share alike in contributing to above fields.

(Conclusions drawn from addresses—
1. Ernest La Prade, National Broadcasting Company.
2. Irving Reis, Columbia Broadcasting System.
3. Walter Pierson, Columbia Broadcasting System.
4. Rikel Kent, Station WLW.)

V.

Government's Responsibility for Educational Broadcasting

A. That the Federal Office of Education regards radio as one of the great forces to be used in the general program for public welfare.

B. That the Federal Office of Education takes a positive position to protect the right of education for time on the air.

(Conclusions drawn from address—John W. Studebaker, United States Commissioner of Education.)

SECTIONS ON SPECIAL PROBLEMS

I.

Educational Broadcasting from Commercial Stations

A. That commercial station staffs feel, in general, that educators on the air are a dull and obstinate lot:
   1. Opinion expressed by a commercial station director of educational programs, but not accepted without qualification by other commercial station people present.

B. That there is a pressing need for better understanding between commercial station officials and educators.

C. That any commercially sponsored program which disseminates valuable information, stirs thought, or raises the level of public taste is to be considered of educational value.

II.

The College and Radio

A. That it is a matter of grave concern to the Federal office of Education to determine how far that Office should use its influence toward encouraging or discouraging the growth of radio activities in universities and high schools:
   1. Should radio (courses for credit, university broadcasting stations, and student radio activities) be centralized in comparatively few institutions?
   2. Should radio be generally encouraged everywhere regardless of local conditions, demands, and facilities?

B. That the Federal Office of Education should not too actively concern itself with such intervention either to encourage or discourage:
   1. The problem will tend to take care of itself:
      a. Local demand and facilities will determine how elaborate a set-up is feasible in a given locality.

C. That universities should offer radio work for academic credit:
   1. If those courses are in content, and method of conduction, in accord with the cultural or professional aims of the college offering the work.
   2. If the college has teachers adequately prepared to teach those particular phases of radio involved in any given course.
      a. No teacher of Speech, English Literature, Composition, Music, or any other field should feel competent to teach radio unless he has: (1) by experience and specific study of the phases involved learned the techniques of adapting his subject to the air; (2) given evidence of sufficient general cultural background to be aware of his grave responsibility in teaching radio as a social force.

D. That radio, as a part of a university program, will inevitably go through a period of development in which mistakes and faulty policies will be present.
   1. It is the duty of educators to be intelligently concerned with such mistakes and to endeavor to eliminate them.

PSYCHOLOGICAL ASPECTS OF RADIO SPEECH

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ONLY a few years ago, comparatively speaking, the world found itself with a new invention called the radio. What its development could or would be was only speculation at the time. Today we know that radio has fairly "taken the world by storm" and is one of the most popular and useful inventions man has yet devised. The radio corporations tell us that today in the United States alone there are 100,000 persons employed in the field; there are 78,000,000 habitual listeners — 20,000,000 listen simultaneously to a single broadcast. There are 21,455,799 homes in the United States which are equipped with receiving sets.

What is the reason for the tenacious grip that radio has so swiftly secured on the mind of man? It is, after all, only the interests, desires, and attitudes of listeners that can vitalize the vast inhuman network of the air. Technical and managerial aspects of radio are much discussed and generally well understood, but human factors upon which every radio policy is based are still for the most part the subject of guesswork.

The really important problems of radio speech are psychological ones. Why do people like to listen for hours to the blare of loudspeakers? Or is it not so impersonal after all? What do they like best to hear? What is the most effective way to address the listeners, to persuade them, to lead them? How long will they listen and what will they remember? Are the prevailing programs adapted to the mentality of the listeners? Are they more influenced by what they see on the screen or by what they read? Who are the people who listen? Where do they listen? When do they listen? What does the listener do while the radio is in use? Why do individuals listen to certain programs? Every psychologist and teacher of radio is asking these and hundreds of other questions.

Speech teachers have to turn to the social psychologist for an answer. Radio revolution caught the psychologist unprepared, however, and left him far behind. "Radio is a novel phenomenon, something new under the psychological sun. It produces audiences of a size hitherto undreamed of and plays havoc with the traditional theories of crowd formation and of group thinking. It eliminates the importance of the eye in social relationships, and exalts the role of the human voice and the auditory sense to a new pinnacle of importance." [1]

The best the psychologist can do is to observe the typical situations which the radio has created and from them frame strategic questions and devise suitable methods for an orderly attack upon the labor which has fallen to his lot. He must approach the problem with a strictly dispassionate attitude, leaving to the reformer and to the legislator the duty of weighing moral and legal questions radio has created. The teacher of radio speech can be helped by the psychologist only after he has carried out his experiments.

One of the most interesting examples of an observation of two audiences, one a radio audience and the other an audience that could view the speaker, is described by Cantril and Allport in their study. A noted minister in Boston was holding a revival. His audience was of such great numbers that only half of them could be seated in the upper auditorium in which he spoke. The other half had to be seated in the lower hall and there listen to the services over a loudspeaker. A well-known psychologist stationed himself at a point where he could observe both audiences during the services and while they were leaving the building after the sermon. According to Cantril and Allport, he made the following observations:

1. In both halls restlessness was apparent, but it subsided more rapidly in the auditorium where the congregation could view the singers, and they readily joined in the singing. The radio group remained silent and impassive.
2. When the evangelist appeared, the group that saw him applauded, the others did not, for there was no possibility of give-and-take between the revivalist and his radio group.
3. When the opening announcements were made the lower group was more resistant.
4. The collection in the upper hall was heavy; it was very light in the lower hall.
5. When the call for converts was given none of the lower hall responded; many from the upper hall did.

[1] A. H. Cantril, and G. W. Allport: *The Psychology of Radio,* Harper and Brothers (New York and London, 1935) p. 4.

The conclusion was, of course, that the evangelist's efforts with the major congregation were eminently successful, but with the radio congregation they utterly failed.

The episode of the minister might seem to lead to the conclusion that radio is a complete failure as an agency in forming crowds, and incapable of controlling mass behavior, but, according to Cantril and Allport, such a generalization would be too hasty, for the situation was not entirely typical of radio nor was the program devised for broadcasting. Any radio speaker would probably make the following criticism of the minister's sermon:

1. It was directed to the visible audience, not to the invisible one.
2. He spoke more rapidly than is customary in radio discourse.
3. It was impromptu, and therefore not well organized.
4. The speaker's manner was abrupt, compulsive, and startling.
5. He worked for immediate rather than for long-run results, for emotional fervor rather than for future action.
6. The overflow part of the audience felt excluded.

A radio speaker of experience, one who is a spell-binder, would, in the same situation as the above, have:

1. Used less bombast and more artistry, less brute force and more cunning.
2. Directed the attention to the invisible audience and made each listener feel welcome as a member of the circle.
3. Aroused the listener's sense of participation just as Huey Long used to do when he would ask each one in his radio audience to go call five friends over the telephone to tell them to listen, or as President Roosevelt does when he says, "My friends."

Teachers of speech and speech psychologists have agreed on the following points concerning effective radio speech:

1. The voice of the radio orator must be persuasive and self-assured.
2. Sound argument is always less important for the demagogue than are weighted words.
3. Effective radio argument need not be sound or complete, but it must be well organized. It is easier to outline an effective radio speech than one given at a mass meeting because the radio speaker is better prepared and he realizes he cannot rely altogether upon excitement of the occasion.
4. Radio speakers take pains to point out that the listener is supported by a vast number of people. (The listener must think that others think as he thinks and that they share his emotions.)

The listener of the radio is less directly under the sway of the crowd situation, and so he is able to form a more objective estimate of the speaker's points. He may curse, cut off the program, play bridge, eat a meal, or most anything else he desires to do. This,

of course, makes for impersonality. This freedom so congenial to the listener is often a nightmare for the speaker or performer who knows neither how many people are listening to him, how attentive they are, nor how well disposed.

Since there can be no real give-and-take between the radio performer and the audience, the performer can not be stimulated by the audience. He does not know if his jokes fall flat; in fact, he does not know anything. This same problem, however, really exists for the audience, too, for they derive no stimulation from each other. This seems to make one less emotional and more critical, less crowdish and more individualistic. This is why broadcasters try to supply social facilitation artificially through the use of studio-audiences.

With these few situations and problems in mind let us briefly summarize the situation as it seems to be at present, that is, let us note the real difference between radio and the rostrum and the stage. After all, this is about all the teacher of radio speech has to go on up to the present time.

1. Radio places a greater premium upon the use and interpretation of the human voice.
2. Radio skeletonizes the personality of the speaker or performer.
3. It develops the use of imaginative completion of the situation in the minds of the listeners.
4. Radio places music in the preferred position among radio programs.
5. It frees the listener from the necessity of conventional politeness toward public performers.
6. It interposes a serious psychological barrier between the broadcaster and his audience through the destruction of the normal circular relationship.
7. It virtually eliminates social facilitation among the auditors with the result that they are less crowdish, more critical and individualistic.

We have as yet only problems, psychological problems, of the radio. The nearest we can come to an answer or to a solution is to examine the results of additional studies which have been made by psychologists.

First of all we must not forget that radio is the modern substitute for the hearthstone, and the family seated before it is obedient to its own conventional habits and taboos. The radio dare not violate those attitudes fundamental in the great American home. It does not dare broadcast programs dealing too frankly with crime, rebellion, or infidelity.

Radio on the whole appeals to the practical interests of men, and the talkie to the repressed desires. Whether people are more

influenced by realistic mental intrusions or by absorbing daydreams of adventure, wealth, and delight — who can say?

It seems to be the nature of the radio to encourage people to think and feel alike. The broadcaster knows he is dealing with a heterogenous audience and that in order to make his message effective for all listeners alike he must discover and exploit the common denominator of their interests. He must aim at the average intelligence, avoid subtlety and sophistication, and yet, if possible, flatter his listeners. He avoids controversy, subtlety, and spiciness. He steers a middle course and appeals to a middle class. His technique is the technique of democracy. Speaking to millions of citizens as "my friends," tends to decrease their sense of insecurity and develop a "crowd mind." [2]

An example of a subject which is frowned on over the air is birth control, for fear of offending Catholic listeners. Even radio humorists may be required to frame jokes so that they do not conflict with the sponsor's interest.

The greatest of all sins in radio, however, is mistiming. Only the President of the United States may pardonably end his remarks several minutes before or after a scheduled time. Even he uses poor psychology when he goes beyond his limit. Herbert Hoover probably lost votes by the thousands on the night he ran thirty minutes overtime when he was campaigning against Roosevelt. Hoover denied his audience Ed Wynn by using more time than he was supposed to have, and his audience became irritated rather than interested in his twelve point program.

Because propaganda is made use of in practically every field of radio speaking today let us at least take note of it here. The type of propaganda depends on who owns and controls the air. The propagandist tries whenever possible to connect his proposition to some preexisting attitude, need, or symbol in meaning. If no direct appeal can be made to an existing attitude or belief, then the propagandist builds up a new attitude by using indirect suggestions, and except in rare instances, the propagandist avoids argument. He uses repetition to overcome resistance, and children especially, because of their lack of experience and critical ability, are susceptible to propaganda.

Let us see for a minute what type of program comes over the air and then try to determine what the public likes best. A survey

[2] *Ibid.*, p. 70.

made of stations of the Columbia Broadcasting Company during two weeks in April 1934 showed the following:

1. Over 60% of all programs were musical.
2. Popular music shared more time than any other program.
3. More classical music was played on Sunday than on week days.
4. Script, drama, and dialogue was broadcast more than any other non-musical type.
5. Educational broadcasts, in the narrower sense of the word, took up only 5% of the time.
6. Federal educational programs were given over the week-end.

(The survey of 1934 is used here because it is the survey of several years past which influences our programs today.)

"Kirkpatrick found that professional people rate news and classical music high; students rate popular music highest; housewives rate classical music high and sports low; laboring groups have marked preference for news and popular music and a distaste for classical music and sports." [3]

Freeman made a study which showed that two-thirds of the young listeners tune in blindly while the majority of older people know in advance what programs they will turn to. Nine-tenths of the listeners prefer network programs to local broadcasts. Two-thirds of the people would rather hear the news than read it. Nine-tenths prefer to hear a speech than to read it. Ninety percent prefer music to spoken material.

Pear makes the observation that some listeners may enjoy mere sounds — music or words may be pleasant because they remove the listener mentally from immediate surroundings just as a movie does for the farm-hand or slum-dweller. Sounds may please because they are "distanced" in space and time. Some people demand that every picture tell a story and all music say something definite. Similarly, some listeners so long as a speaker says "something," do not criticize the manner, but others want to know what has become of the human touch. One says the speaker should speak to him personally in his chair with his pipe, not as if he were in a lecture room or in a cathedral.

Most radio speakers are encouraged to say something and most of them do, for script is scrutinized beforehand, but yet a talk in which every sentence conveys a thought will do more good if one reads it in print.

The radio speaker or entertainer must always keep in mind that

[3] *Ibid.*, p. 95.

people appreciate programs in different ways. The musical executant and mere music-lover — the listener whose profession requires public speaking and the mere listener — the scientific researcher whose exposition consists in reading papers to a visible audience of understanding colleagues who need no warming-up, no irksome explanations or simple concepts, might not appreciate the lecturer who appeals to the common group.

"The example of a lecturer whose matter and manner are both supremely good is rare in these days. Critical listeners to music now demand, and successfully, that excellence in matter shall not atone for badness in manner, and *vice versa*. Until public speaking is regarded similarly, we shall continue to suffer as we do now." [4]

THE ADJUSTMENT OF COLLEGE FRESHMEN TO THE SPEAKING SITUATION [1]

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I. INTRODUCTION

THIS paper summarizes a study of factors related to the process of adjustment of college freshmen to the speaking situation, "The Process of Adjustment to the Speaking Situation," as defined by Barnes,[2] "is the process by which the speaker, in executing the speech act, adjusts, organizes and controls the functioning of his bodily mechanism in accordance with, and in spite of, conditions within the immediate speaking situation." Well adjusted and maladjusted speakers are defined as follows: "A speaker who is well adjusted to the speaking situation possesses a stable, well integrated bodily mechanism, exhibits poise, balance, ease, naturalness, purposiveness. He is free from inhibitions, bodily tensions and mannerisms. He speaks coherently, fluently, emphatically. A speaker who is not well adjusted to the speaking situation possesses an unstable,

[4] T. H. Pear: *The Psychology of Effective Speech* (Kegan Paul, Trench, Truebner and Company, Ltd., London) 1933, p. 25.

[1] Read at Central States Speech Convention, Minneapolis, Minnesota, April 14-15, 1939.

[2] H. G. Barnes, *A Philosophy of Speech Education, Baconian Lecture*, State University of Iowa, March 18, 1938, p. 6.

poorly integrated bodily mechanism; he lacks poise, is unbalanced, ill at ease, unnatural, tense, inhibited; his behavior is purposeless; uncontrolled bodily mannerisms are apparent. He is nervous, excited, frightened, hesitant, uncertain, chaotic, unable to speak coherently, fluently, emphatically." [3]

It was the purpose of this investigation to determine possible factors incident to the development of adequacy in the Process of Adjustment to the Speaking Situation.

II. PROCEDURE

1. The freshman students of the State University of Iowa enrolled in Speech I, September, 1937, served as subjects for this study. They were classified according to ratings [4] on the Process of Adjustment to the Speaking Situation assigned in actual speaking situations by the instructors in charge of the classes. Only the 877 students who received an identical rating on adjustment on two successive performances (interval of one week) in speech making were included in this investigation.

2. A case-history questionnaire,[5] which dealt with environmental background and previous speech training and experience, was filled out by these students, and the answers were tabulated and analyzed in relation to the above ratings.

3. An investigation of the introversion-extroversion and dominance-submission personality traits of 100 well-adjusted speakers and 100 poorly adjusted speakers was made through the administration of the Personality Inventory by Bernreuter.[6]

4. Individual interviews were held with 50 students rated above and 50 rated below adequate in adjustment to the speaking situation (taken from the two groups in 3 above) in order to elicit from each subject information concerning his environmental background, and the nature and extent of his adjustment problems, such as nervousness, forgetting, stage fright, fear of being laughed at, fear of

[3] H. G. Barnes, *Speech Handbook*. Athens Press, Iowa City, Iowa, 1938, p. 12.

[4] Rating scale: 1—inferior, 2—very poor, 3—poor (maladjusted speakers); 4—adequately adjusted speakers; 5—good, 6—very good, 7—superior (well adjusted speakers), ibid., p. 8.

[5] H. G. Barnes, *Diagnosis of Speech Needs and Abilities For Use in College and University*, Iowa City, Iowa, 1936.

[6] Robert G. Bernreuter, *The Personality Inventory*, Stanford, University Press, Stanford University, California, 1935.

failure, humiliation after failure, and dread toward a speaking situation.

III. SUMMARY OF FINDINGS

1. More well adjusted (56%) than maladjusted speakers (31%) had speech courses in high school.
2. The number of maladjusted speakers (50%) equalled the number of well adjusted speakers (50%) who had speech training and experience in high school English classes.
3. Ninety-eight percent of the well adjusted speakers had made from 10 to more than 200 speaking performances, and 90% of the maladjusted group had made from 5 to 10 speeches preceding college entrance.
4. Almost 40% of the well adjusted speakers had made more than 30 speeches, but only 5% of the maladjusted group had made from 10 to 20 speaking performances.
5. Seventy-five percent of the well adjusted speakers had been in plays, the number of plays from 5 to 30; 50% of the maladjusted speakers had taken part in plays, but the majority of these had participated in less than 5.
6. Nearly 30% of the well adjusted group had participated in interschool debate, the number of debates ranging from 5 to 200; 8% of the maladjusted speakers had engaged in less than 10 debates, including class debates in high school.
7. A total of 48% of the well adjusted students and only a very small minority of the maladjusted speakers had participated in interschool competition in extempore speaking, declamation, or interpretative reading.
8. Table I shows that more well adjusted (49%) than maladjusted speakers (30%) exhibited a bias toward dominance, and more of the latter (51%) than the former (25%) revealed a propensity toward submission when classified by Bernreuter's *Personality Inventory*.
9. As shown in Table II the maladjusted and well adjusted speakers exhibited a similar bias toward introversion and toward extroversion; 33% of the maladjusted and 32% of the well adjusted speakers exhibited a bias toward introversion, and 45% of the former and 43% of the latter expressed a prejudice toward introversion.
10. Although the well adjusted students had a higher percentile average (68) on the Iowa qualifying examination than the mal-

CLASSIFICATION OF 100 WELL-ADJUSTED AND 100 MALADJUSTED SPEAKERS ON THE DOMINANCE-SUBMISSION AND INTROVERSION-EXTROVERSION SCALES OF THE PERSONALITY INVENTORY BY BERNREUTER.

TABLE I
DOMINANCE-SUBMISSION

Percentile Categories		Adjustment Ratings 2	3	5	6
Extremely Dominant	99–81	6	8	17	7
Moderately Dominant	80–61	9	7	21	4
Dominant Submissive	60–41	15	4	21	5
Moderately Submissive	40–21	16	5	12	4
Extremely Submissive	20–1	22	8	9	
Total		100		100	

TABLE II
INTROVERSION-EXTROVERSION

Percentile Categories		Adjustment Ratings 2	3	5	6
Extreme Introverts	99–81	13	4	6	5
Moderate Introverts	80–61	13	3	18	3
Ambiverts	60–41	16	6	23	2
Moderate Extroverts	40–21	16	10	14	7
Extreme Extroverts	20–1	10	9	19	3
Total		100		100	

adjusted speakers (percentile average 46), there were low scores in the well adjusted group and high scores in the maladjusted group.

11. The general environments of the maladjusted and the well adjusted speakers were similar.
12. More well adjusted than maladjusted speakers received speech training, experience, encouragement and stimulation at home, followed by training and experience in speaking in the grades and in the junior and senior high schools.

IV. CONCLUSIONS

1. The only consistent and systematic difference between the two groups, according to the data in this study, was that the well adjusted group had a continuous and varied record of speaking experience and speech training from early childhood through high school. The poorly adjusted group manifested consistently the opposite tendency.
2. To aid the student in overcoming maladjustment to the speaking situation, the program of instruction should provide frequent and varied speaking experiences from early childhood as the simplest and most practicable approach, thereby facilitating rapid improvement of the speaker as a whole.

THE AFFECTIVE VALUE OF ENGLISH SPEECH SOUNDS

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WE are interested in this study in determining the affective values of English speech sounds. Specifically, we wish to learn whether speech sounds of themselves may call forth affective responses of Pleasantness or Unpleasantness in the individual who is given an opportunity to react to them. The term Pleasant may be taken to mean "agreeable" or "satisfying." It implies that the individual in his behavior is directed toward the stimulus. The term Unpleasantness may be taken to mean "disagreeable" or "not satisfying." It implies that the individual in his behavior is directed away from the stimulus. Pleasantness and Unpleasantness then may be considered judgments rendered by the responding organism in the light of his normal reaction tendencies toward the stimulus situation. In our definitions of the terms Pleasantness and Unpleasantness we are keeping in mind Woodworth's point of view that ". . . . feelings are reactive tendencies of the organism. Pleasantness and unpleasantness correspond to the attitudes of acceptance and rejection. . . "[1]

We chose *isolated* speech sounds in our experiments in order to rule out as far as possible the influence of meanings which are associated with speech sounds in context. We felt that nonsense syllables, which were used by Moore[2] and other experimenters did not sufficiently eliminate associational influences. The pronunciation of a nonsense syllable is determined by its resemblance to a real word, to which it is somehow similar in spelling. For example, the nonsense syllable *bot* will be pronounced [bɒt] or [bɑt] because a real word such as *not* is pronounced [nɒt] or [nɑt]. Unconsciously, therefore, when an individual reacts to a nonsense syllable, his reaction to it is partly determined by its resemblance to a meaningful word. The use of isolated sounds, we feel, reduces the associative possibilities to a minimum.

Experimental Procedure.—The subjects in this experiment were 130 undergraduate students attending the basic speech courses at

[1] R. S. Woodworth: *Experimental Psychology*, New York, Henry Holt and Co., 1938, p. 241.

[2] C. E. A. Moore: "A Preliminary Study of the Emotional Effects of Letter Sounds," QUARTERLY JOURNAL OF SPEECH, XXIV, 1938, pp. 134-149.

Brooklyn College. The students had all studied phonetics so that they were able to read phonetic transcript and associate written symbols with enunciated speech sounds. The directions for the experiment were:

> You will be presented with a mimeographed sheet containing a list of phonetic symbols. Read the symbols to yourself. React to each of the symbols by deciding whether the sound it represents is Pleasant (P), Indifferent (I), or Unpleasant (U). Indicate your response by writing the letter P, I, or U in the space provided to the right of the symbol. Do not erase any answer. Allow your first response to remain on the paper.

Analysis of Results.—In analyzing the results of our experiments, two special points must be kept in mind. First, the choice of any one category of P, U, or I for a given sound automatically excludes both other categories from being chosen. If, for example, a subject chooses sound X as Pleasant, then he can no longer consider it as either Unpleasant *or* Indifferent; if sound X is chosen as Unpleasant, then it can no longer be considered Pleasant *or* Indifferent. The second point is the manner of treating the Indifferent categories. Have we the right to consider Indifferent an affective state? If an organism reacts to a stimulating situation, may such a reaction ever be so completely devoid of affectivity to be called indifferent. Woodworth, as indicated earlier, describes only two affective states, those of Pleasantness and Unpleasantness. We ourselves feel that a truly Indifferent reaction is not possible. We included Indifferent in our choice of categories because we recognized that some subjects would prefer not to be compelled to make up their minds in short order. Indifferent, then, really may be taken to mean "no immediate decision made" as to whether a sound is pleasant or unpleasant.

In the treatment of the results of our experiment we have taken the points just discussed into consideration. Because the choice of any one category for a given sound automatically eliminates the other two categories, we have presented a statistical analysis with precisely that point in view. No sound may be considered as belonging definitely to any one category unless its percentage is large enough for it to be significantly greater than the combination of the other two. For example, in order for the sound [ɑ] to be considered P, its percentage for P (80.8) must be greater than its combined percentages for U and I (5.4 + 13.9). Throughout our study we have not accepted any difference between categories to be statistically significant unless the critical ratio was found to be 2.5 or greater.

Table I presents those sounds which fall into definite categories of P, U, or I because in each case the percentage for the given category was large enough for its difference to be significantly greater than the combination of the other two categories. According to this analysis, the sounds [ɑ], [ʌ], [m], [a], and [u] are definitely Pleasant, the sounds [dʒ] and [g] are definitely Unpleasant, and the sounds [z] and [j] are definitely Indifferent.

Now, for our second point, does Indifferent really represent a state of indecision rather than an affective state? With this point in mind, we distributed the Indifferent responses proportionately among the Pleasant and Unpleasant responses for each sound. For example, the original percentages for [ɑ] were P, 80.8%; [ʊ], 5.4%, and [ɪ], 13.9%. The new percentages with the Indifferent responses distributed, give us P, 93.8% and U, 6.2%.

On the basis of this analysis, we find that thirty-eight sounds were considered Pleasant and eleven sounds were considered Unpleasant. Of the Pleasant sounds, the percentages for fourteen [w, ɑ, p, l, m, oʊ, ʌ, æ, a, eɪ, u, t, n,] and [ɒ] are great enough to be considered, from a statistical point of view, significantly Pleasant. The following sounds were also Pleasant but their percentages were not great enough to make them significantly so. The other twenty-four are: [ʃ, aɪ, ɛ̃ə, θ, ɜ, ŋ, e, ɑ.ʊ, ə, ʊ, b, ɪ, ɔ, j, ɛ, d, h, o, ʌ, ɪə, ʊə, i, f, ɔə]. Of the Unpleasant sounds, the percentages for five [z, dz, ð, ɔɪ] and [g] were great enough to be considered statistically Unpleasant. The following sounds were also Unpleasant but their percentages were not great enough to make them significantly so: [r, ʒ, v, k, tʃ, s]. Table II presents the data for those sounds which were found to be significantly Pleasant or Unpleasant.

Discussion of Results and Conclusions

Any conclusions drawn from the results of this experiment must be presented with caution and must be considered tentative. In the first place, we do not feel that we have completely eliminated the associational values of the speech sounds. Certainly the sounds [ɑ, m, n, aɪ, ɛə, oʊ], and [eɪ] have definite associational value; the diphthong [ɔɪ] has a regional associational value; which may very well account for its selection as an unpleasant sound. It might be well, therefore, to exclude these sounds from our discussion when we consider the inherent affective values of speech sounds. Eliminating sounds known to have associational meanings, we would be left with

only the sounds [ʌ] and [a] as Pleasant, [dʒ] and [g] as Unpleasant, and [z] and [j] as Indifferent according to one analysis. If, however, we consider the second analysis, in which the Indifferent percentages were distributed, a greater number of sounds without known associational meanings appear to have affective values. These would include [ʌ, p, l, æ, a, t, n], and [ɒ] as Pleasant, and [z], and [g] as Unpleasant.

We consider significant the following aspects of sounds selected as having definite affective values:

1. With the exception of [p] and [t], all sounds are voiced. The

TABLE I

PERCENTAGES OF PLEASANT (P), UNPLEASANT (U), AND INDIFFERENT (I) RESPONSES AND STANDARD DEVIATIONS (S. D.*) FOR EACH SOUND. (N = 130.)

Sound	%P	S.D.P.	%U	S.D.U.	%I	S.D.I.	Sound	%P	S.D.P.	%U	S.D.U.	%I	S.D.I.
w	54.6	4.37	6.2	2.12	39.2	4.28	æ	53.1	4.38	15.4	3.16	31.6	4.08
ɑ	80.8	3.45	5.4	2.00	13.9	3.04	v	29.2	3.99	30.0	4.02	40.8	4.31
ʃ	48.5	4.38	24.6	3.78	26.9	3.89	a	58.5	4.32	6.2	2.12	35.4	4.20
r	23.1	3.70	30.0	4.02	47.0	4.38	ð	23.8	3.74	40.8	4.31	35.4	4.20
aɪ	46.2	4.38	24.6	3.78	29.2	3.99	k	26.2	3.86	40.0	4.30	33.9	4.15
z	16.9	3.29	25.4	3.82	57.7	4.34	eɪ	48.5	4.38	11.5	2.80	40.0	4.30
p	50.0	4.38	13.1	2.96	36.9	4.23	ɛ	37.7	4.25	18.5	3.41	43.9	4.35
l	55.4	4.36	13.1	2.96	31.6	4.08	d	30.8	4.05	17.7	3.35	51.6	4.38
ɛə	36.2	4.22	26.9	3.89	36.9	4.23	u	60.8	4.23	10.8	8.61	28.5	3.96
θ	32.3	4.10	23.1	3.70	44.7	4.36	ɔɪ	18.5	3.41	54.6	4.36	26.9	3.89
ɜ	40.0	4.30	32.3	4.10	27.7	3.89	h	33.1	4.13	19.2	3.45	47.7	4.38
ŋ	46.2	4.37	26.2	3.86	27.7	3.89	t	47.7	4.38	12.3	2.88	40.0	4.30
e	29.2	3.99	23.8	3.73	47.0	4.38	o	37.7	4.25	18.5	3.41	43.9	4.35
ɑʊ	35.4	4.20	30.0	4.02	34.6	4.17	tʃ	29.2	3.99	39.2	4.29	31.6	4.08
ð	28.5	3.96	43.1	4.35	28.5	3.96	n	56.2	4.36	10.8	8.61	33.1	4.13
ʌ	62.4	4.24	6.9	2.22	30.8	4.05	g	10.8	2.72	63.1	4.23	26.2	3.86
oʊ	42.3	4.34	9.2	2.54	48.5	4.38	ʌ	33.1	4.12	26.9	3.89	40.0	4.30
ə	25.4	3.82	23.1	3.70	51.6	4.38	ɪə	33.1	4.12	14.6	3.10	52.4	4.38
ʊ	42.3	4.34	24.6	3.78	33.1	4.13	s	33.8	4.15	35.4	4.20	30.8	4.05
b	32.3	4.10	26.9	3.89	40.8	4.31	ʊə	37.7	4.25	16.2	3.22	46.2	4.37
m	70.0	4.02	6.2	2.12	23.8	3.73	i	50.0	4.38	20.0	3.51	30.0	4.02
ɪ	28.5	3.96	26.9	3.89	44.7	4.36	f	30.8	4.05	30.0	4.02	39.2	4.28
ɔ	41.6	4.32	32.3	4.10	26.2	3.86	ɒ	53.9	4.37	12.3	2.89	33.8	4.15
dʒ	18.5	3.41	63.9	4.21	17.7	3.35	ɔə	37.0	4.24	15.4	3.16	47.7	4.38
j	30.0	4.02	29.2	3.99	40.8	4.31							

$$*\text{S. D.} = \sqrt{\frac{pq}{N}} = \sqrt{\frac{\%\text{ for given sound} \times (100\% - \%p)}{130}}$$

tendency for voice to be produced in feelingful states has been well recognized [3] and need not be discussed here.

2. The sounds [p] and [t] were selected as Pleasant. This despite the expressed opinion of some students of the art of interpretation to the effect that poets are aware of the unpleasant values sounds such as [p] and [t] may have in context.[4]

3. Three of the Unpleasant sounds are fricatives [z, dʒ, ð].

There is little more that we can say about our findings at the present stage. There are a number of problems which suggested

TABLE II

SOUNDS FALLING INTO DEFINITE CATEGORIES OF PLEASANT, UNPLEASANT, OR INDIFFERENT WHERE PERCENTAGE FOR GIVEN CATEGORY IS SIGNIFICANTLY GREATER THAN COMBINED PERCENTAGES FOR THE OTHER TWO CATEGORIES. (N = 130.)

SOUNDS DEFINITELY PLEASANT

Sound	%P	S.D.P.	%U	S.D.U.	%I.	S.D.I.	Critical Ratio (P—U+I)
ɑ	80.8	3.45	5.4	2.00	13.9	3.04	12.60
ʍ	62.4	4.24	6.9	2.22	30.8	4.05	4.13
m	70.0	4.02	6.2	2.12	23.8	3.73	7.02
a	58.5	4.32	6.2	2.12	35.4	4.20	2.78
u	60.8	4.23	10.8	8.61	28.5	3.96	3.60

SOUNDS DEFINITELY UNPLEASANT

Sound	%U	S.D.U.	%P	S.D.P.	%I	S.D.I.	Critical Ratio (U—P+I)
dʒ	63.9	4.21	18.5	3.41	17.7	3.35	4.53
g	63.1	4.23	10.8	2.72	26.2	3.86	4.37

SOUNDS DEFINITELY INDIFFERENT

Sound	%I	S.D.I.	%P	S.D.P.	%U	S.D.U.	Critical Ratio (I—P+U)
z	57.7	4.34	16.9	3.29	25.4	3.82	2.52
j	70.0	4.31	30.0	4.02	29.2	3.99	3.02

[3] R. A. Paget: *Human Speech.* New York: Harcourt, Brace and Co., 1930.

[4] See W. M. Parrish: *Reading Aloud.* New York: Thomas Nelson and Sons, 1933, pp. 209-210.

themselves for further investigation as an outgrowth of this preliminary experiment. How significant are the kinesthetic movements in sound production? Are the affective values of sounds determined by their kinesthetic or acoustic images? How much do the affective values of sounds influence the meanings of words as they develop? Are the words which have undergone little phonetic change more closely related in meaning to their affective potentialities than words which have undergone considerable phonetic change?

The present authors are continuing their investigation of the affective values of speech sounds with a view towards answering some of the questions we have ourselves raised.

GENERAL SEMANTICS AND PUBLIC SPEAKING

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THERE are many ways of looking at human behavior. As a result we may have "many psychologies," rather than "one psychology." The same is true of geometry. Euclid's way of looking at the patterns and forms of measurement is but one along with the geometries of Labatchevsky and Riemann. Similarly, there are many philosophies. One has merely to mention the names of Plato, Leibniz, Dewey and Croce. In this paper I shall be urging that rhetoric or the art of public speaking is not conceivable from one point of view only, but from many. In doing that I shall try to show simultaneously where and how General Semantics contributes one other way of looking at the purposes and functions of speechmaking.

In the attempt to describe what it is that students of public speaking and General Semantics are trying to do, using the method of contrast, I shall focus on three orientations or perspectives of rhetoric as they appear in three books: Adolf Hitler's *Mein Kampf*, Aristotle's *Rhetoric*, and Alfred Korzybski's *Science and Sanity*. I take the third book as the most complete statement of General Semantics and its relation to rhetoric.

Let me begin with Adolf Hitler. There is no special chapter on public speaking in *Mein Kampf* but in the sections on Propaganda in the Reynal and Hitchcock edition there is a host of specific, rule-of-thumb injunctions for the speaker which grow out of Hitler's assump-

tion that in a world of weak men the role of the leader is the basis of politics and all human affairs. The major tenets of Hitler's art of public speaking might be summarized this way:

> That you must always exaggerate your claims, even if fantastically; that you must never concede the slightest justice to your opponent's cause, else men will begin to doubt yours; that your platform, once formulated, must remain fixed; that you must hammer away always at a single idea; that the continued iteration of it will finally induce belief; that there is nothing so likely to be believed in the end as the daring and the unimaginable.[1]

But if these are Hitler's strategies, what is his over-all view of their use? What is this art to be used for? He has been quite explicit and I quote him directly.

> Propaganda's task is . . . not to evaluate the various rights, but far more to stress exclusively the one that is to be represented by it. It has not to search into truth as far as this is favorable to others, in order to present it then to the masses with doctrinary honesty, but it has rather to see its own truth uninterruptedly.[2]
>
> The more modest, then, its scientific ballast is, and the more it exclusively considers the feelings of the masses, the more striking will be its success. This, however, is the best proof whether a particular piece of propaganda is right or wrong, and not the successful satisfaction of a few scholars or "aesthetic" languishing monkeys.[3]

His Minister of Enlightenment Herr Goebbels has perhaps best summed up the position in these words: "Propaganda should not be in the least respectable; nor should it be mild or humble; it should be successful."[4] There is no point here in telling you what this attitude towards rhetoric has accomplished; there is relevance only in an attempt to characterize it.

This is the Rhetoric of Power. We have here the bald statement of one who thinks of public speaking in terms of those tactics, strategies, maneuvers which will get the user what he wants. It is the utterly practical attempt to organize whatever means exist to mobilize the minds of the audience. *Mein Kampf* can thus be conceived as a "ready reference" for those "conscious ways of making the speaker's position more efficient,"[5] of those modes of approach which will

[1] Max Lerner, "Hitler as Thinker," *The New Republic*, CI (Nov. 22, 1939), 132.

[2] Adolf Hitler, *Mein Kampf* (New York, Reynal and Hitchcock, 1939), 236.

[3] *Ibid.*, 233.

[4] Richard S. Lambert, *Propaganda* (London, Thomas Nelson and Sons, 1938), 153.

[5] Kenneth Burke, "The Rhetoric of Hitler's 'Battle,'" *The Southern Review*, V (Summer, 1939), 15.

command acceptance for One's Own Doctrine. This is the Rhetoric of Power in which only the end-result is of importance.

When one leaves "the crude but effective magic" of Adolf Hitler for the *Rhetoric of Aristotle*, one is struck by certain similarities. Thus, Aristotle in three places suggests the value of repetition; there is no mention of slogans, but there are five pages on maxims; in two places Aristotle argues the necessity of recognizing the limited capacities of the "masses;" and there are 41 pages on the means of stirring the emotions.

Now, if one considers the *Rhetoric* as a whole, it is clear that it is designed as a handbook of the ways and means of obtaining the speaker's purposes. As Rowell put it:

> The main concept from which Aristotle proceeds is the idea of persuasion. This term "persuasion" defines for him the general aim of oratory. He uses it in the inclusive sense which makes it embrace all the elements involved in the speaker's effort to influence his audience.[6]

And in these respects the *Rhetoric* of Aristotle is similar in orientation and purpose to that of Adolf Hitler.

But there are differences that should be underlined. Speaking of Aristotle's fundamental position Lane Cooper says, "the emphasis is always upon the nature of the person to be persuaded, and the means by which it is possible, *and just*, to persuade him."[7] There is here reference to the *moral purpose* of the speaker. That is, Aristotle recognizes that Rhetoric is a neutral instrument, a "faculty" which can be used for good or evil, for the "greatest blessing" or the "utmost harm," for "sophistical speaking is made so, not by the faculty, but by the moral purpose."[8] In short, rhetoric is a useful art which should be "rightly and honestly" practiced. In addition, Aristotle would urge the study of this art not only as an instrument of persuasion, but also as an instrument to be used against an exploiter, and to "prevent the triumph of fraud and injustice."[9]

The difference here can be underscored by asking whether Hitler would be willing to permit his methods to be used against him.

There are other differences. First, is Aristotle's analysis of nine sham enthymenes, those forms of argument "that look genuine, but

[6] Edward Z. Rowell, "Prolegomena to Argumentation," Q. J., XVIII (April, 1932), 226.

[7] *The Rhetoric of Aristotle*, ed. by Lane Cooper (New York, D. Appleton and Co., 1932), xxi.

[8] *Ibid.*, I, 1, 1355b.

[9] *Ibid.*, I, 1, 1355a.

are not." [10] And immediately following is his analysis of the methods of refutation, by means of which one may answer statements which though illegitimate may from force of statement pass as legitimate. [11] It is important, then, to notice that Aristotle indicates (as Hitler does not) that a speech may be successful even though it is unjust in its purpose, and spurious in its argument.

To summarize this statement thus far, I should say that the rhetorics of Aristotle and Hitler are concerned with the means of making discourse effective, with the art of organizing statements for the settled purposes of the speaker. Each is concerned with telling the speaker how to "get across" his notions. But Aristotle's position is without the crassness of Hitler's. It is rather softened and leavened by the sense of moral purpose. It is thus that Aristotle's rhetoric can be characterized not as a Rhetoric of Power, but as a Rhetoric tempered with notions of Ethics.

Now there remains a question which neither of these rhetorics undertakes to raise. It has to do with determining whether or not what a speaker says *properly evaluates* the situation to which he refers; whether or not what he says is an *adequate representation* of the actual facts or happenings of which he speaks. This may be clarified by an analogy.

> Let us take some actual territory in which cities appear in the following order: San Francisco, Chicago, New York when taken from the West to the East. If we were to build a *map* of this territory and place San Francisco between Chicago and New York thus:
>
> | | | | |
> |---|---|---|---|
> | Actual Territory | San Francisco | Chicago | New York |
> | Map | Chicago | San Francisco | New York |
>
> we should say that the map was wrong, or that it was incorrect, or that the map has a *different structure*, from the territory. If, speaking roughly, we should try, in our travels to orient ourselves by such a map, we should find it misleading.[12]

Similarly, we should be disturbed if the movie film "The Return of Mr. Moto" were to throw on the screen the events of "Goodbye, Mr. Chips." And again, we do not expect that a letter addressed to Henry Adams of Chicago, will find its way to the Grand Llama of Tibet. In short, we expect our maps to represent their territories, our

[10] *Ibid.*, II, 24, 1401a—1401b—1402a.

[11] *Ibid.*, II, 25, 1402a—1402b—1403a.

[12] Alfred Korzybski, *Science and Sanity, An Introduction to Non-Aristotelian Systems and General Semantics* (Lancaster, Pa., The International Non-Aristotelian Library Publishing Co., 1933), 58.

film titles to refer to the appropriate films, and our letters to reach the designated persons. In like manner, we expect our weather vanes to point to the way the wind blows, our thermometers, pressure gauges, and scales to register the degrees of heat, force and weight that exist at any moment. If these instruments, indicators, or signs fail to perform their function of representing adequately the phase of reality to which they are assigned — we should hurry to replace them. In the same way, should we not expect that our language, our words be used, so that they adequately represent the facts and happenings to which they are intended to refer?

It is in the effort to achieve this map-territory, this language-fact correspondence that General Semantics and Alfred Korzybski make their contribution to a linguistic analysis of rhetoric. General Semantics must not be thought of as a branch of philology or as an instrument for popular debunking, but as a natural science concerned with the problems of values and so of interpretation, i.e., with the whole process whereby men in speaking evaluate properly the happenings, objects, feelings, labels, descriptions, and inferences with which they are dealing. Put another way, the book, *Science and Sanity*, is an attempt to anatomize our linguistic usages to find wherein they falsify reality, and the means whereby this falsification may be corrected.

It is not possible in this paper to tell of the fertility and scope of this analysis of "significance," as it might be applied either to the teaching or practice of public speaking. I can merely hint at a few of its relevant topics. Thus, for example, in 1776, in his *Principles of Rhetoric*, George Campbell included a very "modern" chapter entitled, "What is the Cause that Nonsense so often escapes being detected both by the writer and by the reader?" The question might be answered this way: just as one can draw a map that refers to no existing territory, so too, one can *talk*, without having that talk refer to actual facts and events; thus, for example, I can *say* that the "sun rises in the East," even if the sun is at rest; and, I can *say* that coffee and brandy are being served where you are even though you look in vain for them. In his little book,[18] *The Standardization of Error*, Vilhjalmur Stefansson reveals that though we can *talk* about an ostrich who sticks his head in the sand when danger approaches, no human being has ever seen or photographed the actual event, and thus, when we talk without referring to observable facts our talk is either poetry — or nonsense.

[18] New York, W. W. Norton and Co., 1927.

Then, too, Korzybski has discovered a way of protecting us against those "debaters" who would confuse an approximate description of the world with a complete description of it. Fundamental in language-fact relations is the realization that one can never make a statement which will give the total details of any event — that there never can be a speech or newspaper story which "tells all," *because* "we *see* what we see because we *miss* all of the finer details." [14] And that, *above all,* a consciousness of such omitting, an awareness of the "partial" character of our statements is the beginning of sanity in expression.[15]

Again, Korzybski has called attention to the fact that the search for the absolute meanings of words is fraught with disillusion because meanings exist only in contexts; that some of our most important words possess a multiplicity of meanings, no one of which can be nominated the only interpretation. This point can perhaps be clarified by pointing out that symbols (words) are like vessels, which can be filled variously. Just as a cup will hold water, sand, or any other liquid or solid — so too, any word can be filled with many contents, many meanings. Even the word "is" has at least four well-defined senses. Confusion arises in discussion when one implies that a word means this or that only, when a speaker assumes, for example, that words like Education, Propaganda, Persuasion, Discussion, etc., mean only what he says they mean — when the speaker forgets that there are no absolute meanings.[16] It is helpful in this connection to remember that the dictionary is merely a record of word usage, and not a legislative device.

Further, Korzybski has shown that too often we "split verbally what empirically cannot be divided," that though we "know" that any organism must be treated as a "whole," that there is integration of function we, nevertheless, "talk" of "body *and* mind," "reason *and* emotion," "thinking *and* feeling," "heredity *and* environment" — as if each were a separate entity.[17]

[14] *Science and Sanity, op. cit., 376.*

[15] *Ibid.,* chapter XXVI.

[16] "The test for the multiordinality of a term is simple. Let us make any statement and see if a given term applies to it ('true,' 'false,' 'yes,' 'no,' 'fact,' 'reality,' 'to think,' 'to love,' etc.). If it does, let us deliberately make another statement *about* the former statement and test if the given term may be used again. If so, it is a safe assertion that this term should be considered as *multiordinal* . . . The main point about all such terms is that, *in general,* they are *ambiguous* . . . (they) have only definite meanings on a given level and in a given context." (*Ibid.,* 433-434.)

[17] Cf. the numerous references to *Elementalism, Ibid.,* 64, 87, 107, etc.

But I intended only to hint at some of the array of findings that come from the notion that the very structure of our ordinary language may distort what we mean to convey, mislead ourselves, and others, and actually restrict our horizons of investigation.[18] There is nothing esoteric or mystical in *Science and Sanity*, for as Korzybski himself says:

> Curiously enough, the principles involved are often childishly simple, often "generally known," to the point that on several occasions some older scientists felt "offended" that such "obvious" principles should be so emphasized. Yet my experience, without exception, was that no matter how much these simple principles were approved of verbally, *in no case* were they *fully applied in practice*.[19]

And he is clear in what it is he believes that General Semantics must do. In his words:

> All our doctrines, institutions, etc., depend on verbal arguments. If these arguments are conducted in a language of wrong and unnatural structure, our doctrines and institutions must reflect that linguistic structure and so become unnatural, and inevitably lead to disasters.[20]

I shall conclude with a comparison of the three perspectives.

Pavlov has said that "men are apt to be much more influenced by words than by the actual facts of the surrounding reality."[21] It seems perfectly "obvious" to say that "the map is not the territory, that words are not the facts to which they refer, that symbols are not the events which they are supposed to represent." Yet it is just as "obvious" that men do react to the map, word, or symbol *as if it were* the territory, fact or happening. In a recent class 47 out of 49 students thought that the word "prostitute" symbolized something unpleasant, someone who was socially "bad," yet a week later when the instructor introduced a young woman who spoke on "Social Maladjustment" the class of 49 agreed that both her person and her analysis were quite "good," in spite of the fact unknown to the class that the young woman was making a living in a nearby house of prostitution. That class responded to the "word" and not to the "fact."[22] It is not difficult to respond similarly to the words "Com-

[18] D. G. Campbell, "General Semantics in Education, Counseling, and Therapy" *National Education Association Proceedings*, 1939. (This paper is available in mimeograph form at the Institute of General Semantics, 1232 East 56th, Chicago, Illinois, 4.)

[19] *Science and Sanity*, 539.

[20] *Ibid.*, 59.

[21] *Science and Sanity*, 452.

[22] It is true, of course, that the responses of the students might have been

munist," "Catholic," "Alien," "Truth," "Liberty," etc, as if they were non-verbal facts and living situations rather than mere words. It is as if one were to try to keep warm with the trunk-tag instead of the fur coat inside the trunk.[23] Yet it is the response to words and symbols without regard for the maladjustment that may result, that seems to be the objective of the Aristotelian-Hitler rhetoric. Theirs is the attempt to achieve response to the utterance of the speaker — and not to the facts which that utterance may or may not represent. And the aim of the rhetorical system which you will discover in Korzybski seems to be the prevention of such "un-critical response" and the substitution of responses which more adequately evaluate the situations.

I have had no intention of suggesting in this paper that there is an antithesis or opposition between these three linguistic attitudes. What concerned Hitler and Aristotle was not something which concerned Korzybski. Each represents a difference in total orientation. If for you it is more important to organize the thinking of your hearers to your modes of thought, then you will go to the former; if for you it is more important that statements are "adequate," that they "fit" what it is they are about, then you will go to Korzybski. Hitler-Aristotle would teach you how to use words skillfully for "effect" — Korzybski would teach you how to use words carefully for their *fitness with facts.*

Hitler and Aristotle start with this question: How can we persuade others to think as we do and to act as we would have them act? Korzybski starts with this question: How can I talk about the events of this world so that my talk evaluates them properly? In brief, I conceive the emphasis of the Hitler-Aristotle rhetoric to be on those speaker-audience relationships by means of which the audience becomes controlled by the speaker. The emphasis of the Korzybskian system as applied to rhetoric is on those relationships which exist between an utterance and the facts it is to represent. The one breeds a philosophy of power, the other a doctrine of adequate statement, and proper evaluation for both speaker and hearer.

different had they known of the "fact," or had they seen the young woman in a different setting. But the important point for our purposes is the realization that the setting or context affects the interpretation, and that in responding fixedly to the word, "prostitute," the students were responding to a "fiction," to a symbol considered apart from the varied possible contexts in which it might be located.

[23] Walter N. Polakov, *Man and His Affairs* (Baltimore, Williams and Wilkins Co., 1925), 160.

GENERAL SEMANTICS AND THE CONTROVERSIAL PHASES OF SPEECH

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IN recent years the problem of the meaning of words has been persistently brought to the attention of all students of language. C. K. Ogden and I. A. Richards published their thought-provoking book, *The Meaning of Meaning*. More recently (1933), Count Alfred Korzybski, who has established a school in Chicago called the "Institute of General Semantics," published a difficult, but fundamental book, *Science and Sanity*. Stuart Chase has since popularized the methods of Korzybski and other students of language in his *The Tyranny of Words*. In the field of speech pedagogy, Wendell Johnson has found utility for word-analysis in speech pathology, and offers a course at the University of Iowa, "Speech and Language Problems," and has simplified the Korzybskian approach in a brochure entitled *Language and Speech Hygiene*. In a large sense, of course, there is nothing new in language-evaluation. Thinkers have long recognized the nature of the problem, realizing that there have always been high priests, demagogues, and fakirs who have used language symbols skilfully to conceal and befuddle thought. Among others, Jeremy Bentham demonstrated the difficulty of using words for communication of identical meaning, and Francis Bacon upset the Aristotelian system of logical reasoning.

The methods Korzybski recommends are too difficult and too complicated to be set forth completely in a short article. The semantic discipline is a thorough one, and Korzybski gives courses and series of lectures in order to make his ideas clear to students and auditors. Briefly, however, Korzybski believes that much of the difficulty in language-use comes from the fact that we use words for objects in the physical environment. A word cannot be an object; it merely stands for or represents an object; it is merely a label or symbol. The identification of word with object, says Korzybski, is wrong; such identification leads to loose thinking, to loose language-use, and to a convenient, but inaccurate, system of meaningless high-order abstraction-levels. Words become things or objects, and that they can never be. The little word of identification, "is," is dangerous because the word and the object are made one. "This is a cat," is a simple statement which is true, but which lacks specific meaning. We cannot know all about a cat, or this cat; we cannot know all about

anything. The statement is vague because we do not differentiate this cat from other cats; we do not describe the cat accurately.

The object in the physical environment to which the word "cat" refers is called the "referent." (Incidentally, Ogden and Richards use "referent" in the same sense.) Korzybski advocates the study of mathematics, the better to understand the *relations* of things and situations. We should not attempt high-order abstractions until and unless we use such words consciously and with a clear conception of what they mean. Korzybski has devised what may seem to be a cumbersome instrument called the "Structural Differential" which distinguishes one level of abstraction from another. The lowest is the submicroscopic level, which is beyond observation, even through the microscope. Some valuable abstractions are made by inference on this level: for instance, the concept "electrons." The microscopic level goes beyond human observation and perceptions derived from the senses; and we know as real, objects and animal life found by extra-sensory means, such as the telescope and the microscope. Above this level are varying orders of increasingly higher abstractions. The order, roughly, might be indicated as Space-Time event, Object, Word or Label, Description of Object, Inferences from Description, other inferences and abstractions. The objective of the Korzybskian semantics is to make language correspond to the physical structure of the universe.

Speech teachers may well ask themselves: "How does all this affect me, and my teaching?" The effects are far-reaching since speech uses language as its most typical mode of communication. It must be said, however, that semantics has greater relevance to some fields of speech than to others. The interpretative arts, such as plays, choral reading, declamation, and oral reading of various kinds, where the language has already been prepared by an author prior to our interpretation, use semantics indirectly, in trying to discover meaning in words already set down. The scientific aspects of speech, such as phonetics, voice science, and laboratory research — are also but indirectly touched by semantics. It is in the field of original speech that semantics has its greatest bearing: public speaking, debate, discussion, oratory, extemporaneous speaking, etc. This is the field of controversy because words are used concerning *probabilities*, not demonstrable processes. Korzybski cautions us to proceed carefully so that members of an audience will receive relatively the same meanings from the speaker, who must be particularly careful in his use of abstractions.

All speech teachers are familiar with "stereotypes" or "tabloid words," as they have been termed by Harry A. Overstreet and Robert H. Thouless, respectively. This is the kind of lazy thinking that Korzybski condemns; the mass follows the popular exhorter who uses high-order abstractions such as "democracy," "fascism," and "communism" without defining them. Demagogues, especially, realize the value of such generalities, which arouse millions in behalf of some cause, worthy or unworthy. Thus, the Thirty Years War was fought with heavy losses on both sides, largely because of principles, ideals, and dogmas which men carried around in their heads. The word "honor" has been responsible for many otherwise avoidable, bloody conflicts and misunderstandings. Leaders (and many leaders have won their power through their speaking ability — Hitler is one) become authoritarian mouthpieces of a vague, mystical symbol that stands for something no one is clearly able to define. It is only on the plane of science that words are used accurately to correspond to the physical universe.

We see, then, the dangers inherent in speaking, and in the subtle and biased uses of the word in what we call propaganda. We cannot get away from propaganda; it is all around us, from harmless advertising to causes and crusades. The issue becomes: How best to learn to evaluate what we hear and read?

Korzybski offers in solution his system of semantics; he wants us to break with Aristotelian logic. At this point, it will be seen that semantics has a vital and close relation to debate. If logic is to be non-Aristotelian, then we will have to revise our debating methods. Korzybski, as we have seen, discards the law of identity. He would also discard the law of the excluded middle (there are times when an object is not either A or not-A—it changes its nature, and the conception of its nature changes, likewise), and the law of contradiction, that nothing is both A and not A (exceptions exist, destroying the validity of this law). Especially in science are these laws invalid.

Formal logic fails because of the high-order abstractions that form the basis of the major premise. Debate uses deduction as a starting point, which must be built upon a generalization. The assumptions or postulates that serve as starting-points are words rather than things, and themselves require proof. Debaters, be it said in their defense, define terms in a proposition and thereby are aiding the cause of accuracy in language-use. But debaters also quibble and make hair-line distinctions; they are guilty of logic-chopping and verbal brawls. Some of the terms used in debate propositions require

very careful definition. What does "best interests" (still found in propositions) mean? What is the referent, in Korzybskian terminology, for "best interests?" What is meant by "practicable," "beneficial," "necessary?"

Oratory, apparently in decline in the colleges of America, makes wide use of stereotypes and generalities, fetishes, catch-words, slogans, and high-order abstractions. Speakers in peace oratorical contests appeal to noble motives, but do not tell us how to prevent war or how to deal with it practically. The orators, as a class, have sinned more than have the debaters.

Extemporaneous speaking, because of the short time which speakers have to get ready, is liable to loose definitions and ambiguous meanings.

The forms of discussion — forum, panel, round table, etc. — have proved to be popular in recent years. Discussion groups bandy words about with more promiscuity than debaters ever did. At least debaters have the merit of trying to define a word — perhaps too narrowly, but at any rate, defined. Many discussers never define. This is not to say that discussion groups are to be discouraged; on the other hand, by placing emphasis upon *group* thinking and upon *co-operative* as opposed to *competitive* thinking, they have brought a new breath of life into argumentative discourse. Nevertheless, the chairman and the participants in a discussion, need more precise referents in their use of language.

Congressional "oratory" is full of identifications of a man with a word — a rival politician is called a "communist." The speaker never attempts to define what he means by "communist," and it is doubtful whether he could. The politicians have been more guilty of meaningless abstractions than any other group, although the philosophers and the priest-class are worthy rivals.

Figures of speech and analogies, used widely in original speech, are particularly dangerous. In an attempt to define — which is commendable — in terms of the more familiar, comparisons are made. One has to be careful about these comparisons because identification is likely to result. Those who have coached debating teams know how much depends on the validity of an analogy.

The applications of semantics to speech situations are endless. Already semantics has made a tremendous impact in many fields. We have mentioned Wendell Johnson's application in speech pathology and hygiene. Psychiatry in general has used semantics: Dr. P. S. Graven of Washington has cured mental patients (not organic in

causation). Schools have raised the I.Q. levels, according to the experience of J. C. Trainor of the State Normal School, Ellensburg, Washington. Dr. Douglas G. Campbell and Dr. C. B. Congdon, psychiatrists at the University of Chicago, have used semantics in preventive work: sleeplessness, anxiety states, depressions, and hypochondriacal symptoms. Thurman W. Arnold, in *The Symbols of Government*, has analyzed principles and ideals as affected by language symbols. E. S. Robinson has applied semantics to the legal profession in *Psychology and the Law*. A. M. Weinberg (Physics), S. I. Hayakawa (English), W. R. Boorman (recreational programs in Iowa), M. M. Kendig (revision of curriculum at Barstow School for girls in Kansas City), and J. Brewer (teaching methods at Olivet College) are a few further examples. (Cited by Wendell Johnson, *Language and Speech Hygiene*, p. 39)

We as speech teachers need to make a few applications, also.

AIR-FLOW THROUGH THE LARYNX

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THERE are several theories as to how the sound waves of the laryngeal note are initiated. Some writers claim that vocal fold vibrations are transmitted directly to the surrounding air. Other authors say that periodic changes in glottal slit area release puffs of air which in turn initiate the sound waves. Recently, several British physicists have advanced still another view.[1,2]

Their hypothesis supposes that laryngeal sound is the result (at least in part) of eddies formed in the air stream passing through the larynx. For example, Wood says, "More recently the view has been put forward that the function of the vocal cords is to induce vortex formation in the stream of air as it passes through the (glottal) slit. The phenomenon is similar in this respect to the product of Aeolian tones, but in the voice the vibration of the tensioned cords also plays an important part."[3] The following discussion is an examination of this hypothesis and a description of experimentation testing its validity.

[1] E. G. Richardson: *Sound*, (London: Arnold, 1935), 254.
[2] A. B. Wood: *Textbook of Sound*, (New York: Macmillan, 1930), 194-95.
[3] *Idem.*

At times eddies, or vortices, in an air stream do produce audible musical notes. Briefly, the facts are these.[4] The friction of an air stream rushing past a cylindrical wire may set up two eddies on the lee side of the wire. These two eddies revolve in opposite directions. Moreover, they break away from the wire alternately and are borne downstream. The process keeps repeating itself in such a manner as to form an avenue of alternately placed vortices arranged in two parallel rows. Such a procession is called either Kármán's trail or a Bénard-Kármán avenue. As each vortex breaks away to take its place in the avenue, it exerts a force on the wire. This causes the latter to move to the side. When the next vortex escapes it exerts a force in the opposite direction. Since these vortices break loose at regular intervals, the wire is set into vibration. Whenever the number of vortex pairs breaking loose per second corresponds to a resonant frequency of that particular wire, the latter vibrates vigorously and a clearly audible sound results. Such is the Aeolian harp mechanism to which Wood refers in the statement quoted above.

A related but distinct phenomenon is found in the flue organ-pipe. Here a jet of air escapes from a narrow slit and strikes a sharp edge placed a short distance from the slit. Vortices, or eddies, form along the lee edges of the slit. Upon reaching a certain size these vortices break away and are carried along by the air stream. Here, too, vortices formed on opposite sides of the slit whirl in opposite directions. Moreover, since they break away at different times, an avenue of alternate vortices is again formed. Sound produced in this manner is called an edge-tone. It demands the presence of an edge against which the escaping jet of air may strike. Only then will strong vortex tones arise as air escapes from a slit. Furthermore, the pitch of any edge-tone is very dependent upon a neighboring resonator, which also facilitates the production of vigorous edge-tones.

Aeolian tones and edge-tones have two features in common. For one thing, vortex escape is so timed that a Bénard-Kármán avenue of alternate vortices is formed. That is, all the vortices which are revolving in a given direction are arranged in one row. Parallel to this row is a second row which contains all vortices revolving in the opposite direction. Each vortex is equidistant from the two nearest eddies in the opposite row. The entire avenue, moreover, is carried

[4] Vortex tones are discussed in some detail by Richardson, *op. cit.*, 141-160.

along by the air stream. At appropriate intervals new eddies break away from the wire or slit to join the avenue. The second common feature is that the vortices are formed at the wire or slit before they break away. In the case of Aeolian tones, eddies are fully formed before they break away. On the other hand, vortices need be only partially developed when they escape from the slit. In both instances, however, eddy formation is initiated at the lee boundary of the solid body past which the air is streaming.

A question now presents itself. According to Wood's hypothesis what must be the nature of the air-flow through the phonating larynx? If, as Wood clearly claims, ". . . the function of the vocal cords is to induce vortex formation in the air stream as it passes through the (glottal) slit,"[5] air-flow through the larynx must possess the characteristics typical of vortex tones. To be sure, as Wood states, the presence of vibrating vocal folds complicates the situation. Nevertheless, with this reservation, Wood likens laryngeal sound to the Aeolian tone. It is of minor importance that the laryngeal note might be likened as much to the edge-tone as to the Aeolian tone. In either case, if it is a vortex tone, eddies should form along the glottal margins of the superior borders of the vocal folds. Once formed these eddies should break away from the folds to form a Kármán's trail of alternate vortices. These two conditions are characteristic of vortex tones. Therefore, in testing Wood's hypothesis one must check for the Bénard-Kármán avenue and for the formation of eddies at the vocal fold level. If these conditions are found they furnish evidence in favor of Wood's hypothesis. If they are not present, Wood's hypothesis must be discarded because two fundamental characteristics of vortex tones are lacking.

It would be very difficult to test Wood's hypothesis by direct study of the living larynx. To determine if eddies are formed the breath stream would have to be rendered visible. Even if this were easily accomplished, the angle from which the larynx must be viewed would render observations practically useless. The best procedure, then is to study a similar vibrator which is more accessible. In the present instance, the cushion-pipe model larynx was chosen as a suitable substitute. This type of model is not a perfect functional counterpart of the human larynx. Findings derived from study of the model cannot be applied indiscriminately to the human mechanism. However, as will be clearly shown, this model and the normal

[5] Wood, *loc. cit.*

living larynx are analogous in the functional characteristics which determine air-flow patterns. Hence, the cushion-pipe is adequate for the present study.

The typical cushion-pipe model larynx carries two inflatable, rubber-walled vibrators between which the activating air stream flows. The vibrators used in the present study were roughly wedge-shaped in cross-section,[6] the points of the wedges meeting at the glottal slit. Several pairs of vibrators were investigated. Viewed from above some of these were rectangular. Other pairs were tapered, being narrower anteriorly than posteriorly. These vibrators were studied both when flaccid and when inflated to various degrees.

The following technique was used to make visible the flow of air between the vibrating cushions. A thick vapor, produced by dropping dry ice into water, was released into the supply tube which led to the model larynx. This vapor intermingled with the air stream which caused the cushion-pipe to sound. In this manner the stream of gas escaping between the vibrating cushions was made visible. When this stream was observed stroboscopically the details of air-flow through the model were revealed. This arrangement made it possible to determine whether or not the conditions attending the formation of vortex tones were present when the cushion-pipe sounded.

Using the method just described it was noted that the air-flow varied rather markedly as experimental conditions were changed. However, it soon became apparent that, despite these variations, air-flow through an activated cushion-pipe possessed certain definite characteristics and manifested a unified scheme. This scheme will be discussed after the typical phenomena observed have been described briefly.

In the first place, the air escaping through the slit between the cushions usually was released as a series of puffs. These were easily studied when the model was viewed from the front. From this angle the following progression of events was observed. At the moment the cushions were most closely approximated there was no air flow between them. Then, as the cushions began to separate, a thin streamer of air shot rapidly through the widening slit. This streamer remained a narrow filament until it was about a half an inch from the slit. Its head was then seen to spread laterally. By

[6] The apparatus used in the present study was essentially the same as that reported earlier. See Carhart, R., "Infra-glottal Resonance and a Cushion-pipe," *Speech Monographs*, V, (1938), 65-96.

the time it was an inch or so from the cushions this head was a wide turbulent oval behind which was a narrow tail extending back to the glottal slit. This condition was reached as the glottal slit began to close. As the slit narrowed, the whole puff remained roughly mushroom-shaped but grew larger. There came an instant when the air-flow through the slit ceased, at which time the cushions had almost returned to their position of maximum approximation. At this instant the tail began to shorten. It very quickly flowed into the expanded head, which soon assumed a crescent shape. This crescent-shaped puff continued to move away from the cushions. These events were repeated each time the cushions executed a double vibration. The end result was a series of puffs. In this series all puffs but the one just emerging from the glottal slit were crescent-shaped. Interestingly enough, when such a series of puffs was viewed from the side an entirely different impression was obtained. The emerging streamer was now seen to be about as broad as the glottal slit was long. Furthermore, the puff maintained this width until its head became turbulent. Even then it was seen to expand but little. In addition, as the streamer first emerged from the slit its middle portion led its extremities. This relationship, too, was maintained as the head of the escaping air sheet moved away from the vibrators. The front of the puff remained curved. Hence, after the tail of the streamer had finally flowed into the head, the puff was crescent-shaped when viewed from the side as well as when viewed from the front. In other words, the vibrating cushions released a sheet of air. This sheet was narrow from side to side but wide from front to back. As it encountered the stationary atmosphere above the cushions this sheet became turbulent. Simultaneously, it expanded into a broad, curved lamella of moving air. Once its tail had disappeared the lamella became a somewhat dome-shaped shell. This shape was maintained as the puff swept away from the vibrators.

Incidentally, it was not necessary for the cushions to completely close the slit between them for the air stream to be broken up into distinct puffs. Apparently, even when the slit remained slightly open during maximum cushion approximation the pressure fluctuations at the vibrator level were great enough to halt momentarily the flow of air. Naturally, the greater the separation of the cushions the less the likelihood that the air stream would be completely blocked at any time. In fact, instances were observed in which complete interruption of the stream did not occur. Under these conditions distinct puffs were not observed. Instead the air-flow through the slit fluc-

tuated periodically but was continuous. Here the air-flow might be described as an unbroken stream with periodic additional air releases super-imposed thereupon. A short distance from the cushions these additional periodic releases became turbulent. They did not, however, form an avenue of alternate eddies, nor did they possess the other visible characteristics of vortex tones.

Since the phenomena described above occurred when the cushions were vibrating symmetrically, one may well ask what occurred when they vibrated unsymmetrically.[7] Under the latter conditions changes in air-flow pattern were noted. While at such times puffs were usually produced, these were often deflected somewhat to the side. Moreover, the air sheet emerging from the slit sometimes wavered before becoming turbulent. Finally, the lateral expansions to which the air filament gave rise were often disproportionate, more expansion occurring on one side of the filament than on the other.

It is apparent from the above descriptions that the air-flow between the vibrating cushions varied as experimental conditions were altered. Apparently, this variation was due to differences in the strength of the air stream, differences in cushion inflation, and differences in the vibrational pattern of the cushions. What effect each of these factors exerted was not determined in the present study. What was discovered was that the exact shapes and spacing of the air puffs varied as experimental conditions changed, that the air stream was not always broken into discrete puffs, and that a symmetrical cushion vibration produced characteristic distortions in air flow. What is important, moreover, is that in no instance were the conditions characterizing vortex tones observed. An avenue of alternate vortices did not occur. Nor were eddies formed at the cushions. The turbulence observed was a general disturbance involving the whole air stream. There was no evidence of the regular formation of eddies which were carried along by a comparatively non-turbulent stream. Hence, sounds initiated by the cushion-pipe model larynx are not vortex tones. Particularly in those cases where distinct puffs were released by the vibrating cushions, it is illogical to assume the sound produced to be vortex tones. There was not even a continuous stream of air which could function to form eddies and to carry them along if formed. The air stream was rather a

[7] Whether symmetrical or unsymmetrical, cushion-pipe vibrations were always observed to be synchronous. However, at times one cushion was much more active than its mate.

series of distinct and separate pulses which themselves functioned as sound initiators.

To explain: consider what probably happens when a puff is released. It emerges as a swift moving streamer which forces itself into the comparatively stationary air above the cushions. As it bores into this blanket of air it loses momentum. The turbulence which is set up as the streamer expands and slows down allows for the slow dissipation of some of the energy originally resident in the streamer. However, the impact of the streamer on the air blanket must inevitably give rise to stagnation pressure. This results in a pressure gradient at the boundary of the puff. This gradient produces a pressure disturbance which is transmitted through the surrounding air. Such a process repeated many times per second will produce a train of sound waves. Thus, according to this reasoning, the impact of puffs upon the surrounding air sets up audible sound. Consequently, though the air flowing through the vibrating cushions produces sound, the latter is not a vortex one. The activating air stream does not produce eddies whose formation and arrangement initiates sound waves. In other words, the presence of vibrating cushions introduces a condition which militates against the formation of conventional vortex tones. The vibrating cushions divide their activating air stream into a train of pulses which on encountering the relatively stationary supra-glottal atmosphere function as sound initiators.[8] Moreover, this holds even when the air stream is only partially interrupted by the vibrators. At such times a fluctuating pressure gradient would be introduced into the air stream by the momentary additional air releases superimposed upon the stream. Hence, it may be concluded that the cushion-pipe produces a puff tone rather than a vortex tone. The system is more like a siren than an Aeolian harp.

The conclusion just presented applies to the cushion-pipe. May the same action be assumed to occur in the living larynx? In other words, was Wood wrong in supposing the larynx note to be a vortex tone? The evidence of the present study would suggest that he was,

[8] This discussion makes no attempt to say how much of the sound produced by the cushion-pipe is due to the escaping pulses of air and how much by the direct impact of the cushions upon the surrounding atmosphere. Such a question is outside the scope of the present study. What should be remembered, however, is that the pressure gradient at the puff boundary is theoretically capable of starting a pulse of sound. Moreover, this component of the total sound is due to a mechanism unlike that of the Aeolian harp or the flue organ-pipe.

particularly as his hypothesis refers to normal register tones. The following line of reasoning leads to that conclusion. It was found that the cushion-pipe did not produce vortex tones. Apparently, the condition which militated against such tones was the periodic fluctuation of the area between the vibrators. This fluctuation led to a repeated interruption, which was either partial or complete, of the air stream. In either case, air-flow conditions at the vibrator level were in constant flux. A steady flow of air was not maintained long enough for eddies to build up according to the vortex tone pattern. Accepting this postulate it is possible to reason regarding vortex tone formation in the human larynx. For present purposes the cushion-pipe and the human larynx need not be perfect analogues. All that is necessary is that during phonation the glottal chink periodically obstruct the breath stream. According to the postulate proposed above, such a periodic obstruction would induce a sound which is not of the vortex tone variety. Now, it is well known that periodic narrowing of the glottal slit is characteristic of phonation. During production of normal register tones, for example, there is usually a complete glottal closure once per cycle. In contrast, it is often claimed that during falsetto phonation the glottis is not usually completely closed. However, there is a distinct periodic narrowing of the glottis. Since even the latter condition is similar to that observed for the cushion-pipe and since in the cushion-pipe such activity did not yield vortex tones, it is concluded that human phonation is not normally a vortex tone phenomenon. In other words, the presence of vibrating vocal folds so alters conditions that the laryngeal note is not analogous to the Aeolian tone. Wood is correct in assuming that ". . . vibration of the tensioned cords also plays an important part." [9] He is incorrect in assuming that a typical sound initiating avenue of eddies may build up when the entire breath stream must pass between the vibrating vocal cords. Instead, air-flow is altered so rapidly by fluctuations in glottal slit area that the relatively steady state necessary for the formation of an avenue of alternate vortices is never achieved.

This conclusion follows even though it is based upon study of a cushion-pipe which did not carry a supra-glottal resonator. It might be thought that the addition of such a resonator would have induced the cushion-pipe to yield vortex tones even though such tones could not be obtained without the resonator. However, a resonator is not

[9] Wood, *loc. cit.*

the essential part of a vortex tone system. Even in arrangements, such as the flue organ-pipe, where a resonator is found, it is not the resonator but rather the edge against which the air strikes that is essential to the formation of Kármán's trail. Moreover, an incomplete vortex system will not produce a vigorous musical note such as was yielded by the cushion-pipe. Hence, mere lack of a supra-glottal resonator would not make the cushion-pipe an incomplete vortex tone instrument. Instead, the cushion-pipe is a distinct type of vibrator. It is characterized by air-flow through a fluctuating rather than through a constant area slit. As mentioned above, the same condition is found in the human larynx. Here, naturally, the supra-glottal cavities serve as resonators. However, such cavities are incapable of inducing vortex tones in the absence of a suitably placed edge against which the air escaping through the glottis may strike. Within the human mechanism there exists no such edge. The ventricular folds are normally too far to the side, the epiglottis is pointed in the wrong direction, and the soft palate lies in the wrong plane. Therefore, the vocal mechanism lacks the mechanical arrangement necessary for the production of edge-tones. Furthermore, the vocal folds do produce glottal slit fluctuations similar to those which in the cushion-pipe were observed to produce puffs rather than vortices. Hence, since the mere addition of supra-glottal resonators is not sufficient to induce vortex tones, it follows that sound production in both cushion-pipe and human larynx is more a puff than an eddy phenomenon.

In conclusion, then, the present study was inspired by the desire to test the statement that during phonation the sounds produced are vortex tones. Since in attacking this problem the living human mechanism could not be studied adequately because of its inaccessibility, various cushion-pipe model larynges were used. When these instruments were sounding the air-flow through them did not conform to the requirements for vortex tones. Instead, the periodic fluctuation of the slit between the cushions broke up the air stream into a series of partially or completely separated puffs. Since periodic fluctuation of the human glottis characterizes normal phonation, it is assumed that such phonation is characterized by the release of a similar train of puffs rather than by the initiation of a sound producing avenue of alternate vortices.

A BRIEF HISTORY OF PALATOGRAPHY

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IN the literature of palatography there is no brief history of the subject that combines past experiences with recent developments in the field for the modern student interested in the study of palatography as a part of the general field of phonetics. It is the purpose of this study to present briefly such a history of palatography.

The general subject of palatography[1] might easily be divided into two distinct phases, — a history of those persons who have contributed, however slightly, to the general use and study of palatography, and those who have contributed principally to techniques in palatography. It is my purpose in this article to deal simply, in chronological order, with a number of those persons who have employed palatography in phonetics and speech studies. I shall touch only briefly upon the techniques employed and upon the findings made by these persons. This is intended rather as a summary of the history of palatography, not a detailed study.

Palatography, although apparently a recent technique in the study of phonetics, had its beginnings, roughly speaking, in the latter part of the nineteenth century. During the last thirty years of that century several experimenters and scholars printed their findings in the methods of studying the articulation of sounds. Considerable interest was aroused in this particular field of research. Many scholars merely followed the ideas and techniques of their predecessors; others contributed invaluable information and new methods of study. These will be considered briefly in their chronological order, with slight comment upon the techniques employed.[2]

J. Oakley-Coles, an Englishman, in 1871 first related the means of studying the articulation of sounds. Coles painted the roof of the mouth with a mixture of meal, flour, and mucilage.[3] To determine

[1] See Chapter I of a doctoral thesis by the author, "A Critical Study and Analysis of Contacts." This thesis also is published in abstract under the title, *Interpretations of a New Method in Palatography*, Edwards Brothers, Ann Arbor, Michigan, 1940.

[2] An article by the author dealing specifically and in detail with palatography techniques, *A History of Palatography Techniques*, was published by Edwards Brothers, Ann Arbor, Michigan, 1940.

[3] L'Abbé P. J. Rousselot: *Principes de Phonétique Expérimentale*. Nouvelle ed. Paris, 1924-1925. p. 53. Also: Edward Wheeler Scripture: *The Elements of Experimental Phonetics*. Charles Scribner's Sons. New York, 1902. p. 298;

those portions of the palate touched by the tongue, Coles examined the tongue with a small mirror.

In Grützner and Techmer, who wrote in 1879 and 1880, respectively, Oakley-Coles had two imitators.[4] Grützner, in addition, painted the tongue instead of the palate,[5] using Chinese ink[6] or carmine water color.[7]

Norman W. Kingsley introduced at about the same time the use of a plaster cast of the mouth from which an artificial palate was made.[8] This artificial palate was coated,[9] inserted into the mouth, and received the tongue impression when sounds were articulated. The Kingsley pseudo-palate was long, having a sort of tail which extended far back on the soft palate and the uvula. This palate was too long for the purpose, and caused the operator to make great variations in the record of his sounds.[10]

E. A. Meyer, in 1886, using a modification of the Kingsley method, analyzed Swedish sounds. He used, too, a positive plaster cast of the palate. This, however, was not his only mode of research.[11]

and *Transactions of the Odontological Society of Great Britain*, IV, (n. ser.) p. 110. 1871.

[4] Rousselot, *op. cit.*, p. 53. Also: "Physiologie der Stimme und Sprache." *Handbuch der Physiologie*. L. Hermann. vol. I, 2nd. part. p. 204, 207, 219, 221. (1879).

Note: Scripture quotes as his source for this same statement Kingsley's, "Illustrations of the Tongue," *On Oral Deformities*. London, 1880. Rousselot, however, refers to the above article as it appeared in *Internationale Zeitschrift für Allegemeine Sprachwissenschaft*, III, p. 225. 1887. Since I am placing these experimenters in chronological order according to their publications, I have used the date of Kingsley's "Illustrations of the Tongue."

[5] Scripture, *Experimental Phonetics*. p. 308. Also: "Physiologie der Stimme und Sprache." *Handbuch der Physiologie*. L. Hermann. vol. I, 2nd. part, p. 204, 207, 219, 221. (1879).

[6] *Op. cit.*, p. 204.

[7] Grützner gives palatograms of *l, r, t, s, sj*.

[8] Rousselot, p. 53.

[9] *Ibid.*, p. 53. Also: Scripture, *Elements of Phonetics*. p. 298.

[10] Norman W. Kingsley: "Illustrations of the Articulation of the Tongue." *Internationale Zeitschrift für Allegemeine Sprachwissenschaft*, III, p. 225-248. 1887.

[11] Rousselot, p. 53. Also: E. A. Meyer: "Swedischen Phonetik," *Vox*, 1916, H. 1.

Meyer also was interested in X-ray photographs of the vowel position (See *Medizinisch-pädagogischen Monatschrift, f. d. gesamte Sprachheilkunde,*

Rudolf Lenz (1887) used Oakley-Coles' method as a basis for experimentation,[12] and added Chinese ink to the glue and flour mixture.[13] He suggested the use of photography in a study of this nature.

In 1889 Hagelin came to Paris to pursue research on French sounds.[14] He employed plaster casts of the subjects' palates[15] and artificial palates made by a galvanoplastic method.[16] Hagelin's work was of a "static position"; he made no reference to the vowel.[17]

Kingsley's method formed the basis of the experiments on Hungarian sounds made by Balassa in 1899.[18]

C. H. Grandgent in 1890 published a pamphlet on vowel measurements,[19] and wrote a book on German and English sounds,[20] showing profile views of tongue positions. Grandgent considered the shape of the tongue, size of the oral cavity, size of the palate, shape of

Jahrg. 17, Heft 8, 9, 1907), but he was not the first to make them. Scheier and Barth are supposed to have been the first to make X-ray photographs. M. Scheier: "Die Bedeutung des Röntgenverfahrens für die Physiologie der Sprache und Stimme." *Archiv. f. Laryngol. Bd. 22*, 1909, S. 175-208. Auch als S. A. ercheinen. Robert Tigerstadt: *Handbuch der Physiologischen Methodik*, Band III2, Leipzig, verlag von S. Hirzel, 1912, p. 269. Barth u. Brunmach. "Röntgenographische Beiträge z. Stimmenphysiol." *Arch f. Laryngol.* Bd. 22, 1909, S. 397-407. Vgl. die polenische Auslegung v. Barth u. Scheier im Bd. 22d. Arch., S. 542-549. Tigerstedt, p. 269.

L. P. H. Eijkman, however, according to the date of publication, appears to have been the first to use such methods. *Fortschritte auf dem Geheite der Röntgenstrahlen*, Band VII, Heft. 4, 6. (1904).

[12] Rousselot, p. 53. Also: Rudolf Lenz: *Geschichte zur Physiologie der Palatalon.* Gutersloh, 1887. (thesis). Bonn, 1886; also in *Zt. f. vergl. Sprach.* 1888. xxix, 1.

[13] Rousselot, p. 53.

[14] *Ibid.*, p. 53, 54. Also: *Stomoskopiska undersokingar af franska sprakljud.* J. Hagelin. Stockholm, 1889.

[15] Rousselot, p. 54.

[16] *Ibid.*, p. 54.

[17] Muyskens, John Henry. *The Hypha* (thesis). University of Michigan, 1925. Chapter II, p. 24.

[18] Rousselot, p. 53. Also: *Internationale Zeitschrift für Allegemeine Sprachwissenschaft*, IV (1889), p. 130. J. Balassa: "Phonetik der Ungarischen Sprache."

[19] *Vowel Measurements*, a pamphlet, a publication of the Modern Language Association of America, 1890, supplement to vol. V, n. 2, p. 148-174.

[20] *German and English Sounds.* International Modern Language Series. Ginn and Company, Boston, 1892. p. 24. Diagrams from p. 28-37.

the lips, in the productions of speech sounds, but these were not palatograms.

R. J. Lloyd, wrote in 1890 a doctor's thesis on speech sounds in which he also includes a vowel chart showing the positions of the tongue in profile view, but adds nothing new to palatography.[21]

Otto Bremer (1893) considered German sounds and indicated their positions in both the hard and soft palate areas.[22]

Wilhelm Viëtor, 1894, used a celluloid palate which a dentist made for him.[23]

It remained for L'Abbé Rousselot, however, to make a summary and a somewhat critical analysis of preceding studies in the field of palatography, compile it in a portion of his work, *Principes de Phonétique Expérimentale,* and relate, in addition new techniques devised by himself.[24] He used them so extensively and in such a scholarly way that to think of palatography is to think of the Abbé.

The author would like to mention the work done by Atkinson in connection with obtaining a profile record of tongue position.[25]

Since the turn of the century, the following persons have made contributions to the study of palatography. Josselyn in 1900 made a study of Italian sounds, noticing the different positions of the (i)

[21] R. J. Lloyd: *Speech Sounds; Their Nature and Causation.* Proc. Lit. Phil. Soc., Liverpool, 1890. (Doctor's thesis). Also: G. Oscar Russell: *The Vowel,* p. 141; *and Speech and Voice,* Russell, p. 79. See also: *Die Neuren Sprachen—Phonetische Studien,* "On the Acoustic Analysis of the Spirate Fricative Consonants," VII, p. 488-497.

[22] Otto Bremer: *Deutsche Phonetik.* Leipzig, 1893. Table II.

[23] Scripture, p. 300.

[24] See Rousselot, "Etudes de prononciations parisiennes, les articulations etudiées à l'aide du palais artificiel," *La Parole* 9: 481-513. 1899.

[25] G. Oscar Russell: *The Vowel.* Ohio State University Press, 1928. p. 136, 137. On the aforesaid pages Russell shows Atkinson's profile diagrams of the tongue position as taken from Scripture. Harold W. Atkinson never published his contribution to palatography, which consisted in taking a small piece of godiva or dental compound, placing it while warm on the tongue, making the sound, squirting cold water on the godiva, allowing it to set, then removing it from the mouth. Thus one is supposed to have an idea of the tongue position in making a particular sound or sound combination. Russell has proved, however, through X-ray technique, the possible errors in the experimentation of Atkinson. Atkinson made an improvement in technique at the time of his experimentation from 1890-1900. Rousselot mentioned Atkinson's work on p. 278 of his *Principes de Phonétique Expérimentale.* Scripture makes the same reference to Atkinson on p. 330 in his *Experimental Phonetics.*

after (f), as in the word fi(anco) and fi(glio). Only the *fi* was pronounced. This was his conclusion: "Le même son est souvent pronouncé de façons très différentes par le même individu." [26] Josselyn also wrote a book, *Études de phonétique Espagnole*, in which he employed palatograms, and in his drawings shaded the contact areas of the palatograms. Popovici followed in 1902 with work in simple contacts.[27] E. A. Meyer worked out a unique plan to reproduce the corresponding perpendicular position.[28] He used a linguagram, profile view. Montalbetti in 1903 published an article, "Sur l'emploi de l'ouranine pour les palais artificiels." [29] In 1908 Gombocz wrote about the palatography of the Magyars in *Magyar Palatogrammok Nyelvtudomany Kazlemenyek*.[30] Gutzman, 1909, published his *Physiologie der Stimme und Sprache*.[31] The publication of a few palatograms in 1914 by Panconcelli-Calzia showed an investigation of numerous foreign sounds. He concluded, as had Meyer and Viëtor by that time, that identical sounds could be made by contacts over a large range on the palate. In the above study vowels are not used frequently, and consonants are not evaluated in terms of what goes before or follows them.[32] In the same year, Eijkman published a work, *Tongue Position in the Pronunciation of Some Vowels*, using X-rays.[33] Chlumsky (1914) made 19 photographs of tongue articu-

[26] Muyskens. Thesis. Chapter II, p. 25.

[27] *Ibid.*

[28] Russell, *The Vowel*. p. 310. Also: E. A. Meyer, Plastographic analysis in *Untersuchungen über Lautbildung. Viëtor Festschrift* (Elwert Verlag). 1910. Marburg. p. 172.

Although Meyer made some effort to reproduce and measure the perpendicular position, G. Oscar Russell was the first to use both the superimposition of the cavity area over millimeter cross-section paper, and centimeter interval measurements of the area. He also combined the area of the horizontal palatograms with that of the perpendicular X-ray of the linguagram to compute the cavity capacity in cubic centimeters, thus verifying whether the assumed resonator effect (or tongue and vocal organ position) was actually the cause of the speech sound, and proving that this assumption was a fallacy. (See note on Meyer, pp. 616-617, footnote 11.)

[29] *La Parole*, 1903, S 425-527. J. Poirot, "Die Phonetique," 6, p. 45, in *Handbuch der physiologischen methodik*. Band III2. Tigerstedt, Robert.

[30] *Ibid.*, p. 4. *Handbuch physiologischen methodik*. Band III2.

[31] *Ibid.*

[32] Muyskens. Thesis. Chapter II, p. 25.

[33] L. P. H. Eijkman: "Tongue Position in the Pronunciation of Some Vowels. By Roentgen-Photographs." *Vox*, June, 1914. Heft 3.

lations of French sounds made on the artificial palate.[34]

In 1915 Luciani attempted to show the use of palatography by publishing half a dozen sounds.[35] G. Oscar Russell published in 1919 a work on the Spanish *R* in which he mentions a plan of recording the direction of tongue movement.[36] Heinitz and Panconcelli-Calzia made two other major contributions from 1918 to 1924: *First*, a method of using a series of dots a centimeter apart in order to turn a curved area into a flat one, much after the order of a Mercator projection of a globular world on a flat surface.[37] *Second*, the use of a planimeter to determine the cavity area in one plane.[38] In 1928, in his book, *The Vowel*, Russell gives *first* his precise centimeter

[34] J. Chlumsky: "La Photographie des Articulations desinées au Palais artificiel." *Revue de Phonétique* 4: 46-58 (1914).

Chlumsky uses one subject for his experimentation. The following contacts are recorded: *t, d, n, r, r̆, l, s, z, s, dz, ĉ, l̂, y, t, d, d, n, k, g, ĉ.*

The author would like to cite another article by Chlumsky which is much better from the standpoint of experimental research in palatography; namely, "Les Consonnes Anglaises Comparées aux Consonnes Françaises à l'aide du Palais artificiel et de l'observation Directe." pp. 189-217 in the same volume of the *Revue de Phonétique*. Six subjects participated in the experiment.

[35] Muyskens. Thesis. Chapter II, p. 25.

[36] Russell, "The Pronunciation of the Spanish *R*," *The Modern Language Journal*, 3:174-184 (1919).

The author would like to explain in greater detail the unique contribution in determining the direction of the tongue movement that Dr. Russell has made to palatography and which is not to be found so explained in the literature to date.

In a footnote on p. 175, Dr. Russell mentions that he used a modification of the same method that Professor Bagster-Collins used in taking half palate tongue positions. Collins' method is not in the literature either; so the author, in conversation with Dr. Russell, gathered these facts about the half-palate method: Base-plate wax or thin dental compound was used to make the impression of the hard palate; this palate was cut in two following the median raphe or natural division of the hard palate; then lead foil strips one millimeter in width were fastened to the roof of the palate about a centimeter apart; this partial palate was inserted into the mouth and the sound articulated, and the direction of the tongue thus determined from the direction in which these strips were bent.

[37] Panconcelli-Calzia. "Über Palatogrammetrie," *Vox*, 1918, Heft 5/6, p 172. See also Panconcelli-Calzia, *Die Experimentelle Phonetik In Ihrer Anwendung Auf Die Sprachwissenschaft*. Verlag Von Walter De Gruyer & Co., Berlin, 1924. p. 69-96. (Thirty palatograms with profile views of the tongue position.)

[38] Calzia used a planimeter to determine the contact area. Heinitz has described these same methods in *Vox*, 1922, Heft ½, p. 1-3, "Die Fehlervermei-

measurement of the horizontal cavity area shown by superimposition of the palatogram on millimeter cross-section paper, which gives the area more simply than by the Heinitz-Calzia planimeter process; *second,* a parallel centimeter measurement giving the area accurately enough in square centimeters and even more rapidly; *third,* combining these with the same computations on X-ray profiles of the cavity made simultaneously to ascertain the cubic capacity and to make reconstruction of the cavity possible; *fourth,* indicating for the first time the horizontal lip spread right on the palatogram (This is obtained photographically simultaneously with the X-ray and palatogram. Coupled with the same measurements of perpendicular lip spread shown on the X-ray the size and area of the opening can thus be readily computed); *fifth,* this, along with X-ray palatographic record of cavity dimensions in three planes made possible a reliable reconstruction of the resonator, which theoretically should have reproduced the sound on artificial vocal cord stimulus, but failed to do so; *sixth,* he presents his palatograms made according to the technique which shows the height of the subject's palate, its curvature, and any abnormalities such as growths, or indentations.

Muyskens made the following comments on the study of palatography:

1. Contacts made by a subject are specific and are the result of a movement in a fixed habit.
2. They lie within small and fixed boundaries. Variations are due to tonicity variations.
3. Contacts for voiced consonants have greater energy coefficients than do the corresponding contacts of voiceless consonants.
4. Contacts for consonants preceding the vowel are more regular and larger than the same consonants after the vowel.
5. The vowel (i) before a consonant has a narrower, closer, contact and is more regular than when following the same consonant.
6. If the vowel (a) precedes the consonant, contacts show less area than when following the same consonant.[39]

Fritz Meder and Erwin Reichenbach of Munich made, in 1925, a good application of palatography to the study of sigmatism.[40] Navarro-Tomás, in his book, *Manual de Pronunciación Española,*

dung Bei Der Flächen-Projektion Kunstlicher Gaumen." (See also: *Vox,* 1920, Heft 3/4, p. 32. "Zur Graphischen Darstellung Von Palatographischen Berührungswerten Ein Beitrang Zur Palatogrammetrie."

[39] Muyskens. Thesis. Chapter III, p. 45-46.

[40] "Orthodontische Massnahmen zur Behebung von Sprachstörungen," *Die Fortschritte der Zahnehilkunde.* Erster Band, 1925, Leiferung 4. Verlag von Georg Thieme. Leipzig.

published in Madrid, 1926, shows in a very effective way the use to which palatography can be put. He shows different tongue-palate contacts for *l, n, r, y*.[41] Eleanor Emmett has made some phonetic studies using the artificial palate, and showing that the position of the head affects the area of tongue-palate contact.[42] In 1931 also Dr. Friedrich Gumpertz of Berlin published "Palatographische Untersuchungen an Stammlem mit Hilfe eines neuen Kunstlichen Gaumens" in *Monatsschrift für Ohrenheilkunde und Laryngo-Rhinologie*,[43] in which he not only applies palatography to the stutterer's speech difficulties but relates the techniques employed in the preparation of the pseudo-palate. Gumpertz shows very plainly that the stutterer's speech has more variation than the speech of the normal individual. Madame Jeanne Varney attempted to show longitudinal and latitudinal depth with palatograms.[44]

A new method devised by the author in which there was a dividing of the marked casts from the medial incisors to the end of the hard palate, which made possible a careful check of casts. The following four statements could be made concerning Dr. Muyskens' statements quoted previously:

1. There is not enough evidence to warrant the definite conclusion that surds have greater contacts than sonants.
2. Evidence shows that there is a tendency for consonants after the vowel to have greater contact than the same consonants before the vowel.
3. The vowel (i) before a labial consonant has a narrower, closer space between side contacts than when following the same consonant. This fact agrees with Dr. Muyskens' conclusion, but labial consonants only have been included.
4. The contour of the contact pattern lies within a very small zone. This fact agrees with Dr. Muyskens' conclusions. The following contact patterns are exceptions to the above statement: *ga, gɪ, kɪ*.[45]

[41] Check pages 108 for *n*; 128 for *n* (palatal); 110 for *l* (alveolar); 111 for *l* (relajada); 112 for *r* (simple); 115 for *r* (fricativa); 118 for *r* (multiple); 124 for *y* (palatal); 126 for *ỹ* (fricativa). He has palatal contacts of tongue worked out in a precise manner for the above-mentioned sounds. There is, however, no allowance for individual differences.

[42] Eleanor Emmett: *Phonetic Studies with the Artificial Palate.* Unpublished Master's thesis. University of Chicago, 1931.

[43] *Op. cit.* 65 Jahrg. (Verlag Urban & Schwartzenberg, Wein, 1931).

[44] Jeanne M. Varney: *Études sur l'Amèricain.* Paris, 1933. (The author has not seen this source.) See supplement to the *Language Journal of the Linguistic Society of America*, vol. 14, no. 4, Oct.-Dec., 1938, p. 32.

The author is indebted to Dr. E. F. Haden for these last two sources.

[45] See author's thesis, p. 45.

In 1936 Dr. Louise Kaiser read before the Second International Congress of Phonetic Sciences at the University College in London a paper, "The Shape of the Palate and Its Effect on Speech Sounds," [46] in which she explains her study of the shape of the palate and its relationship to speech sounds. She employed a pseudo-palate for the purpose of comparing the dimensions of the various types of palates rather than for the purpose of studying tongue-palate contacts. Her work, however, has a rightful place in a history of palatography.[47] Mr. J. H. Willemssen [48] who conducted a part of Dr. Kaiser's experiment, found that in a study of gramaphone records and palatograms of twenty-five subjects that "it appears that subjects with low palates pronounced the consonants more sharply and clearly, whereas their vowels often were rather dull. Subjects with high palates, on the contrary, usually gave clear, sonorous vowels, whereas, their consonants were often indistinct." [49]

During the summers of 1937, 1938, 1939, in the Psychological Laboratories at Oberlin College, Dr. R. H. Stetson, Dr. C. V. Hudgins, and the author, worked on the problem in palatography involving the relationship between area in tongue-palate contact and duration of time.[50]

Dr. E. F. Haden of McMaster University, Hamilton, Ontario, has worked on the problem of vowel influence on the consonant. He makes this statement: "There is greater accord between the con-

[46] *Proceedings of the Second International Phonetic Congress.* Cambridge ment to the *Language Journal of the Linguistic Society of America,* vol. 14, no. 4, Oct.-Dec., 1938, p. 17-18.

[47] She used the Gumpertz method of constructing the pseudo-palate; that is, placing a celluloid layer on the plaster positive. Gumpertz' method is well described in the article, "Palatographische Untersuchungen an Stammlern mit Hilfe eines neuen künstlichen Gaumens," *Monateschrift für Ohrenheilkunde und Laryngo-Rhinologie,* 65 Jahrg, Verlag Urban & Schwartzenberg, Wien, 1931. See also "Biological and Statistical Research Concerning the Speech of 216 Dutch Students. *Archives Neérlandaises de Phonétique Expérimentale.* Vol. 15, 1939.

[48] *Archives Neérlandaises de Phonétique Expérimentale,* vol. 12, 1936. "Some Dutch Dental Consonants Investigated by Means of the Artificial Palate."

[49] "The Shape of the Palate and Its Effect on Speech Sounds," *Proceedings of the Second International Phonetic Congress,* p. 26.

[50] R. H. Stetson, C. V. Hudgins, and E. R. Moses, Jr.: "Palatograms Change with Rates of Articulation—A Study of Synchronous Kymographic and Palatographic Recording." *Archives Neérlandaises de Phonétique Expérimentale.* vol. XVI.

sonant and the following vowel, than between the consonant and the preceding vowel." [51]

Haden used a method of showing longitudinal and latitudinal depth of the palate with his palatograms, a method similar to that used by Madame Varney.[52]

Recently, the author published an article, "Palatography and Speech Improvement," based upon his studies previous to the experiments at Oberlin College.[53] The conclusisons of that article are as follows:

1. In the correction of foreign brogue or speech defects, it is not justifiable to say that any so-called correct tongue position for any consonant can be indicated correctly exactly.
2. There is a possibility not only that different persons speaking the same language do not make the same tongue-palate contact for the same sound or sound combinations; but that the same persons do not make the same contact for the same sounds, even on the same day.

These conclusions infer that in the correction of foreign brogue and speech defects, palatography may be used, but that it cannot be used so extensively as it has been by phoneticians in the past. Because of other factors, already mentioned, it cannot be said that in the articulation of a given sound or sound combination the tongue should strike the palate at a given place in a given contact pattern.

[51] E. F. Haden: "The Physiology of French Consonant Changes," supple- University Press. 1936. p. 22-27.

[52] "On any palatogram, the area which appears as having been touched by the tongue is not wholly representative of the actual area so touched. The surface of the artificial palate slopes at various angles away from the observer. It was therefore advisable to outline sections of the palate, along the median line, from incisors to velum, and to one side of this median line, for the longitudinal cross-view, and also latitudinally at right angles to the median line.

"A plaster of Paris mold was made containing a depression into which the artificial palate fitted exactly. The median line as determined from tracings of palatograms was marked on this mold. Plaster of Paris was poured into the other half. This gave a negative of half of the palate cavity, and the edge of this negative cast outlined the median section. A similar negative was taken in the same way, 1 cm. to the left of the median line . . .

"In the same manner, using a sculptor's clay to dam off the palate cavity, and casting with plaster of Paris, each of nine latitudinal sections was obtained. These are at right angles to the median line. The outline of each can be plotted against the appropriate level in the palatogram tracing, for analysis." *Op. cit.*, p. 30-32.

[53] *The Journal of Speech Disorders*, vol. 4, no. 2. June, 1939.

Needless to say, factors [54] other than position must, therefore, be involved; and these, too, must be given more attention while position is given less than has been customary in the past.[55]

Although palatography has been a phase of phonetic study, it has been only in recent years that studies in palatography have become extensive and show evidence of reaching more definite conclusions.

A SPEECH PROFILE

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HOW can we best picture for a speaker his audience's opinion of his performance? A method which deserves serious consideration is the use of the speech profile. A speech profile shows audience opinion of a speech in the form of a graph. It is a combination of two well-known devices, the profile and the speech rating scale. The advantages of this combination are these: (1) On the qualitative side, the speech profile is as comprehensive as the rating

[54] Dr. G. Oscar Russell, in conversation with the author, has summarized the various factors he would consider as being vital, as follows:

1. length of time the consonant is held,
2. the way one moves into position,
3. the way one moves out of position,
4. the amount of breath pressure behind the consonant,
5. position of the vocal organs,
6. types; whether voiced or unvoiced, occlusive, fricative, affricative, nasal, or liquid. *Ibid.*, p. 105.

Amman, Meyer, Eijkman, Scheier and Barth, all were concerned primarily with tongue position rather than with factors contributing to tongue-palate contact.

J. C. Amman (*Surdus Loquens.* 1692. *Dissertatio de Loquela*, 1700. W. Viëtor has published Amman's dissertation in *Vox*, 1917-1918: 27-28. —. 3-147.) had some fantastic ideas about tongue position. He held that there was a correlation of position of tongue with the Hebrew characters. He was no nearer the solution than those people who set up a vowel triangle and then tried to prove their theories by X-ray studies of the tongue position. The author feels that Amman should be mentioned here along with Meyer, Scheier and Barth, and Eijkman, for his work was a forerunner of the work done by these men.

[55] These conclusions were based upon the study of 1140 palatograms of 13 subjects uttering 102 isolated sound combinations.

scale on which it is based; (2) In its qualitative aspect, the validity and reliability of the scores on which the profile is based have been determined by appropriate statistical procedures, and are always subject to study; (3) The profile shows clearly the relatively strong and weak points of the speech as well as its general level of effectiveness, as judged by the audience; and (4) This device makes possible a point for point comparison of two or more speeches. Accordingly the use of the profile avoids sketchy or incomplete description, presents information of a known degree of dependability and makes unnecessary an involved verbal description.

The profiles shown below are based on audience evaluations measured with the Bryan-Wilke scale for rating speeches.[1] They were selected to illustrate some of the interesting findings which have resulted from the construction of profiles for student and professional speakers. Contrasting types of profiles for various speakers show such characteristics as these:

1. Uniformly low, medium or high ratings on all traits.
2. Conspicuously high or low ratings on only one or a few items; that is, outstanding strong or weak points in speaking ability.
3. Approximately equal improvement on all items during a course of instruction in public speaking.
4. Marked improvement in some characteristics, but none whatever in others during a course in public speaking.
5. Virtually identical profiles at the beginning and end of a course in public speaking, indicating no change in speaking characteristics.
6. Virtually identical profiles based on random halves of good-sized groups of raters, indicative of the reliability of the profile scores.
7. Markedly different ratings on certain items by supporters and opponents of the speaker's views.

The accompanying profiles are for the most part self-explanatory. The number 1 below each line corresponds to the unfavorable extreme on the rating scale and the number 5 corresponds to the most favorable rating. In the case of the double profiles of student speakers, the solid line represents the third speech of the term in a summer session class and the broken line represents another speech before the same audience three weeks later, after the speaker had delivered about fifteen additional speeches.

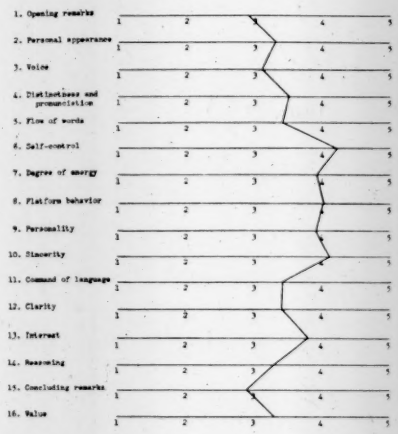
How reliable are such profiles, and in the case of profiles of two speeches by the same person, how large a change from one speech to the next can be considered significant? Each point on the profile

[1] A. I. Bryan and W. H. Wilke. A technique for rating public speeches. To be published in the *Journal of Consulting Psychology*.

B-W PROFILE

Speaker: Senator Lundeen Audience: Eastern Public Speaking Conf.

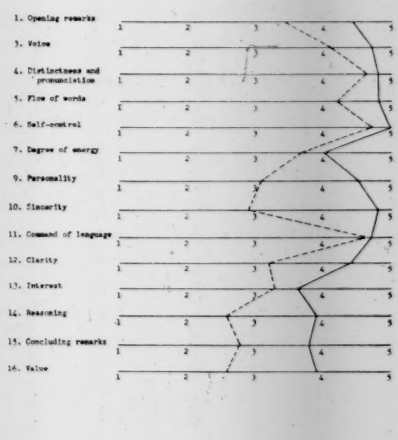
Date: March 30, 1940 Number of judgments: 35 B-W Score: 56.4



B-W PROFILE

Speaker: President Roosevelt Audience: Radio listeners; — = pro; - - = anti

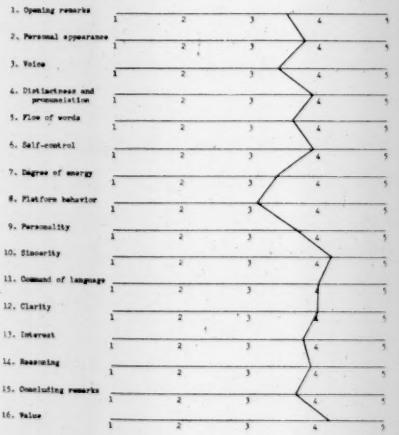
Date: Spring 1940 Number of judgments: 10 B-W Score:



B-W PROFILE

Speaker: Dr. George H. Gallup Audience: Eastern Public Speaking Conference

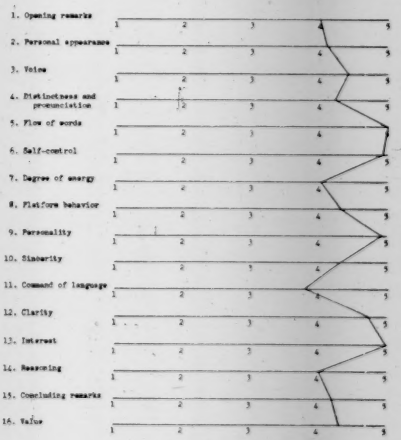
Date: March 30, 1940 Number of judgments: 26 B-W Score: 60.1

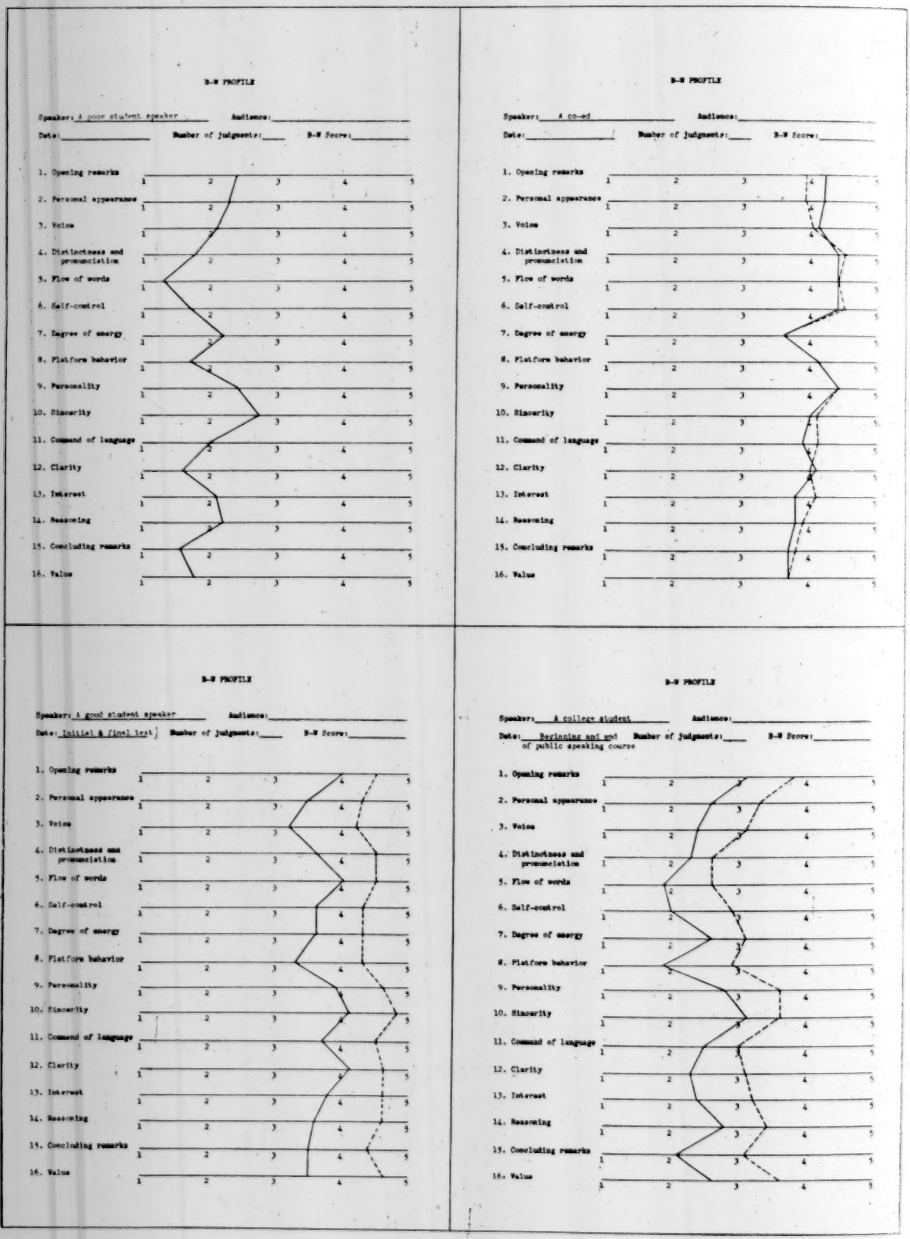


B-W PROFILE

Speaker: Well-known radio speaker Audience:

Date: Number of judgments: B-W Score:




B-W PROFILE
Speaker: A poor student speaker
Audience:
Date:
Number of judgments:
B-W Score:
1. Opening remarks
2. Personal appearance
3. Voice
4. Distinctness and pronunciation
5. Flow of words
6. Self-control
7. Degree of energy
8. Platform behavior
9. Personality
10. Sincerity
11. Command of language
12. Clarity
13. Interest
14. Reasoning
15. Concluding remarks
16. Value
1 2 3 4 5
B-W PROFILE
Speaker: A co-ed
Audience:
Date:
Number of judgments:
B-W Score:
1. Opening remarks
2. Personal appearance
3. Voice
4. Distinctness and pronunciation
5. Flow of words
6. Self-control
7. Degree of energy
8. Platform behavior
9. Personality
10. Sincerity
11. Command of language
12. Clarity
13. Interest
14. Reasoning
15. Concluding remarks
16. Value
1 2 3 4 5
B-W PROFILE
Speaker: A good student speaker
Audience:
Date: Initial & final test
Number of judgments:
B-W Score:
1. Opening remarks
2. Personal appearance
3. Voice
4. Distinctness and pronunciation
5. Flow of words
6. Self-control
7. Degree of energy
8. Platform behavior
9. Personality
10. Sincerity
11. Command of language
12. Clarity
13. Interest
14. Reasoning
15. Concluding remarks
16. Value
1 2 3 4 5
B-W PROFILE
Speaker: A college student
Audience:
Date: Beginning and end of public speaking course
Number of judgments:
B-W Score:
1. Opening remarks
2. Personal appearance
3. Voice
4. Distinctness and pronunciation
5. Flow of words
6. Self-control
7. Degree of energy
8. Platform behavior
9. Personality
10. Sincerity
11. Command of language
12. Clarity
13. Interest
14. Reasoning
15. Concluding remarks
16. Value
1 2 3 4 5

represents the average opinion of a group of raters concerning that particular item of the rating scale. The above questions are therefore equivalent to asking (1) how reliable are the ratings on separate items of the rating scale, and (2) how much can the obtained ratings be expected to vary from true ratings as a result of chance fluctuations?

It has recently been established [2] in a study of behavior ratings, somewhat analogous to the rating of speeches, that fine scoring of rating scale items results in much greater reliability than coarse scoring, to a degree considerably in excess of what had been supposed. The following data may therefore be more conservative than if the instructions had been modified to permit finer scoring. The method followed by the raters was to place a check mark above one of the five descriptive adjectives for each item, resulting in a five-step scale. On the basis of this five-step scale, the reliability of each item was found for a group of 26 speakers, each rated by 20 raters. From the coefficients obtained by comparing 10 raters with 10 others, the reliability coefficients for groups of 20 raters each were computed by the Spearman-Brown formula, and are shown in Table 1.

TABLE I

RELIABILITY OF ITEMS

Item	r	Item	r
1	.62	9	.84
2	.91	10	.76
3	.90	11	.80
4	.87	12	.74
5	.93	13	.53
6	.73	14	.33
7	.85	15	.65
8	.88	16	.59

An indication of the extent to which an average rating on a single item would vary by chance was sought by computing the standard error of measurement for each item. The results are given in Table 2.

The average of these standard errors of measurement is .12. By reference to a table of the fractional parts of the area under the normal probability curve, this may be interpreted to mean that in 99 cases in 100 the obtained average rating will not vary from the true average rating by more than .65. This is of course a general figure for the scale as a whole. Separate estimates can easily be

[2] Horace Champney and Helen Marshall. "Optimal refinement of the rating scale." *J. Appl. Psychol.*, 1939, 23, 323-331.

obtained for each item. However, the reliability of the various items is likely to vary somewhat among different groups of speakers, and as mentioned above, may be affected considerably by the number of

TABLE II

STANDARD ERROR OF MEASUREMENT FOR EACH ITEM.

Item	σ_m	Item	σ_m
1	.15	9	.11
2	.09	10	.11
3	.10	11	.06
4	.12	12	.09
5	.13	13	.17
6	.17	14	.16
7	.14	15	.16
8	.08	16	.11

scale steps used in scoring, so no single figure should be taken too seriously. On the basis of the data so far analyzed, the conclusion may be drawn that differences greater than .3 probably represent differences which are statistically reliable.

Certain practical applications and research uses of such speech profiles are apparent. They may be used by an instructor to check up on his own analysis of a performance, or to reenforce his suggestions by adding the weight of audience opinion. They draw attention to the strong and weak points of technique, and exert corresponding motivational effects. The profile of a later speech drawn on the same sheet as the first rating provides a quantitative measure of change which is more reliable than the judgment of a single individual. By the use of this device, a speaker can compare the reactions he obtains from different audiences. For research in audience psychology, it may be found possible to increase greatly the reliability of such ratings. Studies of the relation between profiles based on audience ratings and various tests of ability, attitude and information should help to clarify our understanding of the factors which produce changes in the proficiency of a speaker.

SPEECH TRAINING IN THE ELEMENTARY SCHOOLS OF WISCONSIN

ALICE FLICKINGER
Shorewood, Milwaukee, Wis.

IN 1937 a committee from the Wisconsin Association of Teachers of Speech met to consider ways in which this association "might become a more active agent in the promotion of effective speech work in the state." The group reported the following:

"We believe that there are a number of activities in which the association should engage. Among them are:

1. A survey of the status of speech in the state. What work is being offered in the grades, the high schools, and the colleges and universities? What has been the preparation of those who are offering this work? Such a study we believe is fundamental and a necessary preliminary to other activities."

This is only the first of the six activities recommended by this committee. It was this particular recommendation, however, that gave impetus to a survey of the speech training offered by the elementary schools of the state.

The survey was made in the spring and fall of 1938. Questionnaires were mailed to all the elementary school teachers in the cities and towns of Wisconsin. The inquiry was planned to provide answers to the following questions:

1. Who directs speech training in the elementary schools?
2. What speech training have these teachers had in preparation for this work?
3. How much class time is given to speech training?
4. What speech activities are most common?

Responses were received from 1,189 teachers working in 297 different schools. These responding teachers were undoubtedly the ones most interested in speech training. Any interpretation of the data which they have provided must consider this fact.

It is apparent that the speech training of younger children is almost completely in the hands of the regular classroom teacher. Only nine responses were received from special speech teachers. Several of these were devoting the greater part of their time to speech re-education.

The training of these 1,189 teachers, indicated by the number of speech courses which they had taken in college, ranged from no

speech training of any kind to seven years of college training with speech the major study. Thirty-nine percent of the group had taken no speech courses, 34 percent had taken one course, and 27 percent had taken two or more courses. Sixty-eight different institutions had contributed to the speech training of these teachers. Five Wisconsin colleges, however, were listed most frequently: Milwaukee State Teachers College with 254, Oshkosh State Teachers College with 60, Marquette University with 54, the University of Wisconsin with 44, and Whitewater State Teachers College with 31. Two hundred and eight teachers had taken the course, *Fundamentals of Speech,* offered by Milwaukee State Teachers College.

The average amount of time devoted each week to speech activities showed a range from twelve hours in grade one to four and a quarter hours in grade six. In general, about one-fourth of the time given to speech activities was in preparation for public programs.

In an effort to determine the character of the speech work in these schools, the questionnaire listed seven types of speech activities for checking. The teachers of grade one indicated phonics and oral reading as most frequently used. In grade three phonics, dramatization, and oral reading were most common. In grade six oral reading and discussion were checked most often, closely followed by talks, dramatization, and speech correction.

This report does not describe the status of speech training in all the grade school classrooms of Wisconsin. It does, however, indicate that there is widespread interest in this phase of elementary school work. It reveals the necessity for in-service training of the classroom teacher. It gives a general idea of the type of speech activity used in classrooms and the large proportion of the school day devoted to these activities. These will be basic considerations in the further work of the Wisconsin Association of Teachers of Speech.

A UTILITY SPEECH COURSE: AN EXPERIMENT IN COOPERATION

F. KENNETH BRASTED
Fordham University

THE New York World's Fair has received worldwide publicity and acclamation. Many of my readers have visited the Fair during the past two summers. No two people have the same or an equal interest in the Fair. If you have just amply eaten, you may not appreciate the statisticians' figures that fifteen million hot dogs and fifteen million hamburgers were sold on the grounds. . . . these, strung necklace fashion, would reach from New York to London. . . . rolls to match would pave all the city streets. Those who visited only the amusement area, concentrating on a certain type of "show," may have decided that the Trylon represented nothing more than a closed fan and the Perisphere a pearl bead.

But surely the Fair and its symbol has a deeper meaning. Any project taking three years and costing $155,000,000 — a task equivalent to building an entirely new city of 800,000 population on a previously uninhabited spot — must have a greater significance to us engaged in education. Let us say that we educators bear the same relation to the general public that the Trylon bears to the Perisphere. It is we who point the way toward the future. Whatever case we may make out for speech, we all agree that it must play an important role in the World of Tomorrow — as well as today and its Fair.

Feeling that the World's Fair would be a fruitful source of employment for the college man, the Placement Director of Fordham University, Mr. Dwight F. Bracken, decided to sponsor a short course for juniors, seniors, and recent alumni — a course that would enable the student, upon its completion, to have something concrete to offer a prospective employer. Because it was recognized that speech could best be used as the coordinating subject, a subject that could integrate all aspects and uses of the other fields to be considered, I was invited by the Administration to function in the capacity of coauthor and coordinator of the proposed course.

Our problems, as do the problems of education generally, fell into three classes; viz., organization, method, and content. Obviously, the greatest problem was that of content . . . especially when we were faced with the realization that it was to be a short course — a two-hour session once a week for eight weeks. In this article, therefore, my remarks are concerned primarily with this item of content.

We knew we would have many students enrolled who would not be working at the Fair during the summer. I was especially interested in this aspect, for if we could work out a course that would prove generally helpful to a student seeking a position after graduation, such a procedure might have future educational implications, with speech-centered integration courses for seniors a logical offering. We knew, too, that we could not concentrate on any one type of exhibit or concession, for we hoped the Placement Bureau would receive calls from many and varied companies for students to work as guides, lecturers, demonstrators, and the like. What, therefore, was to be the content of our course?

The course must, we decided, treat of the values which might be expected to come out of the Fair. We wanted such a treatment to develop in the student an attitude of open-mindedness and a desire to have an integral part in directing the great social forces liberated through the Fair activities. The student had to see himself as a vital factor of a great event which might definitely alter the course of contemporary civilization. We wanted him to achieve the desire to bend every effort and energy toward cooperation with his exhibitor and in the complete fulfillment of the exhibitor's purpose.

The logical starting point was a discussion and an understanding of the *Functional Origins of Fairs.* In considering the development of fairs, it was easy to show the interrelationship of speech and progress, for the fairs resulted in the stimulation of trade, the dissemination of cultural and religious ideas, and at times even served as media of propaganda.

This was followed with an explanation of *Building the World of Tomorrow.* The students could readily understand that in this Fair, "the climax of the ages in man's achievements," fine speech would assume a major role — be it in the small person-to-person conference, the huge auditorium, or through the media of radio and recordings.

The Art of Addressing Small Groups, beginning with a sound definition of speech, was the next topic. It was a case of hitting the high spots of a semester course in Public Speaking and doing it in just one period. However, since most of the students had had at least one fundamentals course in speech some years earlier in their college career, I hoped that this lecture would recall major points of importance; and I tried to clinch these points by ample illustrations applicable to work at the Fair.

The lecturer selected for the session on *Sales Psychology* was a

man well versed in both the theory and practice of public speaking. Accordingly, he correlated much of his subject matter with such angles of public speaking as audience analysis, appeals for action, and the like. This, in itself, helped greatly to offset the brevity of the preceding discussion in the speech area.

Again, in the meeting on *Voice and Diction,* we were faced with the immense problem of telescoping. Here, as in all sessions, rather comprehensive mimeographed material outlining the subject matter covered by the lecturer, was given the students.

In the lecture on *Showmanship,* the dramatic way of doing a thing, the instructor was able to tie in much of that material with our work of the preceding week on voice and diction.

The last major item was *Personal Hygiene For World's Fair Workers.* Besides a discussion of health problems, the lecturer pointed out the implications present for mental hygiene and expressive bodily action. Obviously, we were more than fortunate in being able to draw on teachers who were not only specialists in their fields but were thoroughly grounded in, as well as interested in and appreciative of, the fundamentals of speech.

We had originally planned to hold during the course a *Public Speaking Laboratory.* At that meeting each student was to have had an opportunity, even though all too brief, of receiving an evaluation of his voice and delivery through written criticisms by the instructor, and by his fellow students broken down into smaller groups. However, when the enrollment of this course, originally estimated at two hundred to two hundred fifty, passed the six hundred mark, we found it necessary to give up entirely the plan for the laboratory session. Instead, by way of recapitulation, the last meeting of the course was devoted to a *Group Discussion,* with the entire course faculty as a panel.

Now, besides definitely aiding between two and three hundred upperclassmen and alumni in securing positions at the Fair, just what do we feel we achieved by the presentation of the World's Fair Personnel Course? We believe we succeeded in focusing the academic experiences of the student upon the history and development of fairs in general, with particular emphasis on the New York World's Fair; in stimulating knowledge of business psychology and salesmanship; in developing an ability to see that point of view of the other person that enabled the students to act as true hosts; and, above all, in demonstrating to each student the immense importance attached to good speech by business and social leaders — as well as demonstrating how speech cuts across every area studied.

What reception did this course receive from (1) the students, and (2) the companies with which the students were placed? This is a question which I wish I could answer scientifically for my readers. No techniques were used to enable me to do this; so I shall, by way of conclusion, give you my personal opinion in answer to these two questions.

The course was given in both our uptown (College of Arts and Sciences, School of Education, and School of Pharmacy, primarily) and downtown (School of Law and School of Business) divisions. Although our registration uptown was larger than it was downtown, I believe the course was more enthusiastically received in the latter branch. Perhaps the smaller registration was a causative factor.

Further, the enrollment downtown included a large proportion of students holding full-time or part-time day or night positions. It seems to me that this type of student, bucking the competitive element of the business world day after day, is more receptive to suggestions which he sees he can apply immediately in his daily associations. The college undergraduate so often has had no exposure to these factors. Also, this type of integrated short course was an entirely new experience to the students of the college (and to those of us giving it, too). We believe, though, that the majority student opinion was that the World's Fair Personnel Course was worthwhile. Those of us who administered and lectured in it concur fully in this concensus.

The companies involved showed considerable interest in our project and were most cooperative with the Placement Bureau. After all, most of the items included were selected from suggestions made by leading personnel directors, who had been personally consulted in detail prior to our assembling the materials of the course. They felt that such a study, although only of eight weeks duration, would be most helpful in integrating the student's prior college training in academic field. Personnel men are definitely interested in this type of experiment in integration.

I am pleased to have been coauthor and coordinator of the World's Fair Personnel Course, and especially delighted to have had this privilege of presenting its story to my fellow speech teachers. For I saw in the course what I hoped would be a genuine opportunity of showing the importance of speech training, the need for more of it, and the place a speech department, however small, may play in the work of such special projects as this.

More and more we see short courses, career courses, vocational series, and the like, being offered in our colleges, schools, and com-

munities. We, as teachers of speech (and it makes no difference on which level we are working), must keep wide awake and see to it that our absolutely essential work receives due recognition and its rightful place in all such activities — speech across the curriculum.

THE TEACHER OF ENGLISH IN SPEECH

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THAT Jack-of-all-trades, the teacher of English in college, finds himself apprenticed to many chores around a campus, but to none, perhaps, more commonly these days, than as an assistant in the Department of Speech. In addition to his tasks as faculty adviser of publications, coach to dramatic groups, patron of musical organizations, and so forth, he is asked not only to judge debates and orations, but actually to take over classes in debate, and teach unsuspecting students the principles of speech. Accustomed to the many calls on his versatility, he undertakes the speech work gaily, believing, as one of his kind said, rather frankly, that "anybody who can speak English can teach public speaking." With intelligence, and a capacity to learn, he may be able to make this bluster good over a period of several years, but he discovers, sooner or later, that his training in English was far from being a training in speech, too. And what he has to learn is more than the distinction between Winans's "essay on its hind legs" and a good speech.

Certainly, if he knows his job of English, he can carry a good deal over from it. The principles of grammar are pretty much the same for speech as for writing, perhaps a trifle more catholic in detail, but just as rigid about subject-predicate agreement, the relationship among clauses, and the rest. The routine of research, that he imposes on his classes in literature, is very similar to the course of study that lays the groundwork of a good address: the sources in spoken work are different, and the emphasis on quotation-marks and footnotes more awkward to bring into the finished product, but the need of thorough investigation is equally great. Despite, too, the distinction drawn between logical and speech outlines, a good expository theme is concerned with stating a case almost as much as a speech is,

and sometimes with the same subordination of logic to an attempt at proving the case in point. Each and all of these details of documentation, grammar and organization, the teacher of English can take with him to his new job.

Some well-cherished opinions, however, that have been firmly set by his training in literature, he can not afford to take with him. One is his notion of a "good style." While it may be claimed that all good writing is "speakable," in the sense that the words run smoothly on the tongue, it is equally true that some very good writing, when it is spoken, leaves a deliberate effect of artificiality that no amount of speech art can eliminate. The sentences of Sir Thomas Browne, for instance, are lovely, craftily put together, and melodious; but they are sentences to be intoned, and not spoken, as one speaks outside a pulpit or off a rostrum. In the same way, the delicacy of implication in the words of Charles Lamb, his broken phrases, and the overtone of quotation that gives one of the charms to his essays, can none of them be brought out, or grasped fully, in the single presentation of a speech. Style of this sort is for re-reading more than for reading; and it is not possible for the speaker, no matter how careful his inflection and his emphasis, to shade into his words the subtle afterthought that such a style requires.

To make this concession to the existence of a few well-recognized styles of writing need not start an argument about "good" or "bad." If there is any certainty at all in discussions of style, the principle that the writer's personality is ultimately responsible for it has most authority; and nobody who remembers Lamb's stutter and his moody comments would convict him of ever wanting to write a speech. For his purpose the style is excellent, flavored with the man, but a teacher of English, who happens to select the *Essays of Elia* as his ideal of prose writing will have to think of a more workaday model if he expects to teach speaking as well.

Something much more intangible about style, however, than this specific literary quality, is apt to be a handicap to the literary enthusiast who becomes an apprentice to forensics. Though the day of rhetoric is not gone,—perhaps what is needed, for English ends, is a return to it,—the old rhetorical tricks are more or less suspect in literary quarters. The device of balance, for instance, still very helpful in speaking, reminds a student of literature of the worst efforts of Johnson in the *Rambler,* and he resents the idea that such an obvious, and, to him, undue emphasis should ever be necessary. More likely than not, he associates rhetorical questions, also useful to the speaker,

with Macpherson's *Ossian,* and thinks of the rhetorical trick as part of the meretricious flavor of that poem. If he feels bound to warn his speech students in the direction of short sentences, he recalls that one of the great masters of rivetting sentences was Macaulay, who, by a skilful use of them, produced a very Whiggish and biassed conception of English history. His principle, if he is a good teacher of English, is that a thing worth saying should be well said the first time, so that there will be no need to repeat the idea in other forms for the sake of new emphasis. He is chary of parallel constructions, because they were employed very commonly by Lyly and other Italianate writers for display rather than for truth. Whatever, in fact, smacks of artifice in style, or seems to mark an emphasis, where no emphasis is needed, brings to his mind one example or another of the overuse of rhetoric; and it is part of his critical pride to be able to recognize such exaggerated devices when he meets them.

Of course, from the standpoint of literature, he is perfectly justified in this attitude. The influence of the rhetoric that the English language borrowed from Latin, in the sixteenth century, might have been damaging if it had not had the loose native English to struggle against; and, time and time again, since then, the effort to shackle the freedom of English speech with one device or another has fortunately resulted in the language shaking itself loose. Any such effort, at the present time, in the interests of one dogma or another, is to be resisted by the teachers of English who believe in the language as a free means of expression. Textbooks of speech have themselves begun to recognize this, and to insist on an easy conversational style as the one best suited for the kind of exposition and argument they recommend.

On his side, too, the teacher of English must make concession. It is the concession that every manual emphasizes, when it compares expression in speech with expression in written form. The speaker must make his idea clear in one speaking: the writer's words can be read again and again. The speaker must be crystal clear, if he is to be understood: the writer can afford ambiguities that will pique the reader's meditation. The speaker, addressing himself to the intelligence of a crowd, cannot hope, as the writer can, for exceptional understanding. For these reasons, and for others, devices of emphasis, —repetition, balance, etc.—that are unnecessary for the writer, must be employed by the speech-maker, if his words are not to be empty sounds in the air. In his own classroom practice, the teacher of English knows the truth of this only too well; for, if he is contented with

a calm, unforceful reading of a lecture, the students take little away from him, unless they spend the hour taking shorthand notes. And then, of course, the teacher may profitably publish his notes, dismiss his classes to the library, and devote himself to research.

With an interest in style, and the manner of writing, which is his preoccupation in the composition class, goes the English teacher's other interest in literary studies. Speaking rather generally, one can say of him that he tackles every problem from a literary angle. He prefers a magazine like *Harpers,* with its non-technical discussions of politics, medicine, economics, etc., to the *Congressional Digest, Hygeia,* the *Economist,* and other specialized publications. He reads Stuart Chase, Hogben, Einstein, in his recent popular exposition, rather than textbooks on economics, mathematics, or relativity. Rather frequently, he goes so far in his mistrust of specialists that he takes a pride in being ignorant of the workings of his car and radio, and has more than his share of the common dislike of politicians and professional reformers. As a result of his reading of novels and dramas, he is inclined to approach social problems from the angle of the individual, having a contempt for the statistics of the sociologist and the case-records of the social worker. These are, of course, broad generalizations, and teachers of English probably know more outside their own field of interest than teachers of any other subject: but the non-technical flavor of their knowledge most of them would be the first to acknowledge and feel proud of.

Such an attitude is impossible in classes of speech. There the range of subject-matter is limited only by human experience; and the practical purpose of much public speaking demands a practical handling and expression. The clerk in a real-estate office, who takes a course in speech, expects to talk about real estate, and should probably be encouraged to do so. It is his teacher's responsibility to learn something about the quite unliterary interests of real estate men. A group of insurance underwriters, who go to the trouble and expense of organizing a class in public speaking, are equally concerned with using their skill on familiar topics of insurance. Once again, their teacher ought to appreciate their language, and discover a little about their specialty. Even for the average undergraduate, who is not yet pledged to a job, the advice to ride his hobbies and familiar interests is good advice, in the speech class; and one group of undergraduates can drag its teacher over an immense territory.

In theory it is all very well to insist that the students make a non-technical approach to every subject, warning them that few

audiences are conversant with the jargon of the professions. A teacher may even argue that unless he himself, without further study, is able to follow a discussion in economics, industry, or what not, neither will an average group of listeners. What actually happens is that each teacher allows his students to go as far as they want to, into the arcana of a subject he knows something about; and forbids them to trespass, unintelligibly, on subjects beyond his scope. Before the teacher of English is long in the game of speech, he will find himself becoming an authority, with or against his will, on the League of Nations, or Disarmament, or Old Age Pensions, or Social Security. For the technique of speaking cannot any more be handled *in vacuo*, without reference to the subject-matter, than the technique of composition; and every teacher who has corrected a bunch of long themes realizes that the organization and expression are good in direct ratio with the supply of information. For better or for worse, then, as he continues teaching the students to talk well on a wide variety of topics, he finds himself becoming increasingly detached from his "literary" attitude.

With his appreciation of practical topics goes its corollary,—a respect, more or less guarded, for the kind of approach that practical people make to the subjects in which they are interested. The opinion of Sir Oracle is much more effective in business than in the academy, —especially if Sir Oracle is making assertions outside his own special field. So the teacher learns to use oracular authority; and encourages its use, with due precautions, in his students. In the world of affairs, too, a sound logical idea carries no weight unless it is loaded down with an array of figures. It is possible for the teacher of speech to show how statistics can be used to the best advantage, without advocating the "lie in the mind" that is more dangerous than the "lie on the tongue." In spite of the proverb about the one swallow and summer, the debater soon learns the knack of finding a swallow that gives an appearance of summer; and, once again with reservations, he can impart the knack. Sometimes, perhaps, he will feel guilty in seeming to recommend devices of persuasion, the logical fallacy of which he clearly recognizes. The unemphatic, point-by-point movement of a scholarly article in the *PMLA* appeals to him more than the special pleading of an editorial or the subtle bias of a popular article. On this basis, he makes large reservations in his own mind for the many-faced worth of statistical proof, for "instances" that may not be typical, and for the voice of "authority," which is always the voice of a fallible man.

The chances are, that, with such provisos always in mind, he will make a better teacher of speech than he would be without them. At the same time, he must realize that the purpose of speaking is much more immediate than the scholarly purpose of research. The end is different, and the means adapted to the end must be different, too. He can not afford to have the attitude, rather well exemplified in the remark of a scholar about a fellow faculty member: "I have my doubts about that man's knowledge. He is far too eloquent about it." Why should facility in speech be considered more of a handicap than facility in writing? And still the notion persists that the speaker, in order to come down to the level of an audience, waters his information, reducing its abstraction to a specific instance, and wrestling its sound logical order to a rhetorical one that discards truth for the sake of a present emphasis. For the teacher of English, with an academic sense of "truth," there is no other way of meeting this objection than to place on him the simple task of speaking. He may not even be asked to convince an audience: it will be enough to see that he tries to interest a group for a comparatively short time.

Here, of course, is the crux of his problem. It is one thing to hold an abstract idea of style, inviolable by the gross touch of usefulness: it is quite another to use a passable, not to mention an effective, manner of speech before an audience. Bookish values have their standard of excellence, and it is the responsibilty of the teacher of English to know and apply it: but the contact that every form of speaking must make with the quite un-bookish world demands other values and a different standard. Sheer eloquence, of course, is not by any means the only standard of speech, however helpful it may be: but a capacity to keep words moving is fundamental, and it is not a skill to be learned from books. Strange as it may seem to one who has no wide practice in speech, the ability to make spoken words mean exactly what they are supposed to mean is different from the similar task in writing, and only practice on many audiences teaches the ability. The speaker who has not found it necessary to return, again and again, to the same idea, with a new emphasis and another form of words, is either an amateur or rather totally out of touch with the people he addresses. Exactly as he is interested in what he says, and wants an interest awakened in his listeners, will he clutch at any device in the repertory and make use of it for his purpose.

In point of fact, the job of teaching speech lays on the teacher of English a fresh course of training for himself. If he is quite honest, he discovers, as he scrutinizes his own speaking habits as

carefully as he watches those of his students, how slovenly the classroom routine can make a man. He fumbles for words, hums and haws, stretches ungainly arms about, and leaves long, awkward silences during which the industrious students catch up on their note-taking. Inevitably he assumes the pose that, if he has mouthed a number of sentences, with no matter what unpleasing tone and lack of emphasis, his task as an instructor is accomplished. In the speech class, if he is to be helpful at all, he cannot so forget his manners. The criticism he offers of mumbling, awkwardness, obscurity, etc., is worthless, if he himself is an awkward mumbler. Though he will not descend to the level of expecting his students to speak exactly as he does, with the same inflections and in the same tone, he keeps in mind that his example is important. The skills of speech have to be learned, and the apprentice respects the journeyman and profits from his instruction only so long as the latter's craft is more proficient.

Perhaps it might be an enlightening exercise for many of us who teach speaking to have the students grade us, and criticize us, as freely as they criticize one another. With such an ordeal ahead of him, the teacher of English would have an inkling of what is really in store when he is transferred from the course in literature to the course in public speaking.

SOCIAL FACILITATION IN PERSUASION

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SOCIAL facilitation is generally held to be a significant factor in crowd, audience, and group behavior, and therefore a contributory force of considerable interest to the persuader. Allport has defined it as "an increase of response merely from the sight or sound of others making the same movements." [1]

Probably this definition should be broadened somewhat to reveal a more comprehensive description of the phenomenon.

Defined in terms of function, social facilitation incorporates two effects in chronological sequence; (1) it liberates responses on the motor threshold of an individual in a group — by removing the social

[1] F. H. Allport, *Social Psychology* (Boston: Houghton Mifflin Company, 1924), p. 262.

inhibitions blocking responses which he is prepared to make, it allows these responses to become overt; (2) after these responses are liberated, it intensifies them quantitatively and qualitatively. Thus when a particular person in an audience is moved to applaud some affirmation of a speaker, others, on the point of doing the same thing, join in the activity of overt approval; soon the applause swells to great proportions through an increase in the number of persons responding and through an increase in the acoustic vigor of each individual's response.

Defined in terms of process, social facilitation operates psychologically through the mechanism of perception — perception of other individuals performing the response which in a given individual exists as a motor set. It operates through one or more of three levels of perception: (1) the direct-sensory, (2) the supraliminal, and (3) the subliminal. Examples of the first, most frequent and most potent medium of facilitating stimulation, are legion. The second, perception within the marginal fields of attention, would explain such a reaction as a person's reaching into his pocket for money to contribute in response to a speaker's appeal because, even though attention and glance are fixed on the speaker, "out of the corner of his eye" he sees others reaching too. The third might account for simultaneous, spontaneous group responses — the sudden surge of applause, for example — on the basis of what we call "hunches," subconscious perception of stimuli too far below the threshold to enforce recognition but affective in behavior. (Although those who aver the existence of extrasensory perception might add a fourth level, probably most psychologists would accept these three levels as adequately interpreting such a fourth.)

Social facilitation operates through one or a complex of several kinds of perception, based upon sensation on any one or more of the above levels: (1) the visual, (2) the auditory, (3) the tactile, (4) the olfactory, and (5) the kinesthetic. The first two, the essence of Allport's definition, are of course the most frequent and the most potent sources of facilitating stimuli. But the third, operating in direct or subsidiary fashion wherever the members of a crowd are packed close enough to "rub elbows" with each other, helps to explain such phenomena as the impulsive surging forward of lynching mobs. The fourth would account for a student's lighting a cigarette in an examination room where smoking is not permitted as soon as he senses the burning tobacco of another's cigarette, even though he is concentrating on the writing of the examination.

And the fifth is that component of the picture which explains much of the secondary intensifying effect of social facilitation: the kinesthetic sensations involved in the individual's performing of the response reinforce and augment that response.

The physical mechanism of social facilitation may be one or a combination of any of four pathways of diffusion: (1) the facilitating stimuli may originate in individuals near the forecenter of the group, then spread outward toward the periphery; (2) the facilitating stimuli may originate in the most suggestible (i.e., most uninhibited, least critical) individuals, distribute thence to less suggestible members of the group; (3) the facilitating stimuli may originate in those who are least hostile to the persuader and to his persuasive message, circulate thence to those less receptive; (4) the facilitating stimuli may originate in the most influential individuals (quantitatively, the majority; qualitatively, those in economic or social or intellectual or emotional or volitional ascendancy), diffuse from them to others. The fact that ignorant, impulsive individuals in a crowd can sometimes direct the action even of intelligent persons lends force to suggestibility as a determinant of origin. Clark, in her experiment with gullibility in olfactory perception, noted the first two of the above pathways as operative and concluded that "the influence of the leader first affects a number of especially susceptible persons in the order of the favorableness of their positions, and that the influence then radiates from them for a certain period of time." [2] Griffith's finding that the grades of University of Illinois students seated in the forecenter of lecture rooms were significantly higher than those of students sitting in front, in back, or on the sides led him to the conclusion that social facilitation effected better attention in the center of the audience [3] — though this appears not to hold for students at the University of California at Los Angeles, as Jones and Cooper in a more recent study [4] could find no correlation between seating position and grades. A safe assumption might

[2] Helen Clark, "The Crowd," in "Studies in Social and General Psychology from the University of Illinois," *Psychological Monographs,* XXI (No. 92, 1916), pp. 34-35.

[3] C. R. Griffith, "A Comment upon the Psychology of the Audience," in "Critical and Experimental Studies in Psychology from the University of Illinois," *Psychological Monographs,* XXX (No. 136, 1922), pp. 36-47.

[4] F. N. Jones and J. B. Cooper, "The Relation between College Grades and Class-room Seating Position," *Journal of General Psychology,* XVIII (April, 1938), pp. 423-427.

per se, through its contribution to producing involuntary attention, be that although the forecenter may not be a determining factor it provides an environment from which facilitating stimuli may most easily emanate. Existence of the third pathway becomes evident when we reflect that what facilitating stimuli are at work in the audience must issue from those individuals reacting positively to the speaker and his assertions, and such individuals will be those who come with minimum hostility or whose hostility wanes in the early stages of the persuasion. The last of the pathways is supported by the several experiments demonstrating the facilitating influence of prestige and majority opinion in the group, and particularly by Gurnee's observation that in *viva voce* votes doubtful members of the group tend to be influenced in the direction of the most vigorous response.[5] Probably all pathways are operative in the distribution of facilitating stimuli: it seems credible that if the most influential individuals were highly suggestible and were friendly toward the speaker and his ideas and were seated in the forecenter of the group, diffusion of facilitating signs would reach its maximum effectiveness.

We may delineate social facilitation, then, as the liberating and intensifying effect upon an individual's response in a group situation, produced by direct-sensory, supraliminal, and subliminal perception of visual, auditory, tactile, olfactory, and kinesthetic stimuli derived from other individuals in the group performing the response which in the given individual exists as a motor set, the perceived stimuli emanating from the forecenter of the group or from the most suggestible, the most receptive, or the most influential members within the group. In operation this approaches a reciprocal influence among all members of the group.

Examining this phenomenon from the individual's point of view, however, we must still further broaden our concept to understand certain of its ramifications in behavior. For inanimate objects may sometimes serve as auxiliary facilitating cues. As Williamson has pointed out, "a person is as obviously socialized by the sight of a personal gift, a coat thrown into the gutter, or a jimmied pantry window, as he is by the jostling throng or the call of a street-peddler."[6] So mere sudden perception of the national flag during

[5] Herbert Gurnee, "A Comparison of Collective and Individual Judgments of Fact," *Journal of Experimental Psychology,* XXI (July, 1937), pp. 106-112.

[6] E. G. Williamson, "Allport's Experiments in Social Facilitation," in "Studies in Psychology from the University of Illinois," *Psychological Monographs,* XXXV (No. 163, 1926), p. 143.

the peroration of a Fourth of July address may touch off or augment responses on the motor threshold of an individual just as efficaciously as perception of others' overt reactions. Moreover, imaginal stimuli may be just as facilitating as real stimuli. Such imaginal signs are of two sorts: (1) those mentally recollected and (2) those socially projected. The former are the basis of much of what we term sympathetic behavior and are adequate to induce such behavior. Thus description by a speaker of a situation kindred to past emotional experiences connotatively linked with certain concepts of an individual may serve, through recall, to make these experiences functional in consciousness and, as a result, to liberate a desired response; depicting the ravages of tuberculosis may facilitate, in one whose mother has died of the disease, a sizable purchase of Christmas seals. Or if such recollected stimuli are insufficient to release the response, at least they aid significantly in the interpretation of facilitating signs from the behavior of other persons in the group.[7] Social projection, the assumption that others make the same response to a given situation that we do, is likewise a phenomenon which may distort perception. When a speaker makes a statement which meets with our approval, we tend to believe — and therefore to perceive — that others in the group approve it too. When a speaker successfully implants a suggestion in our attending consciousness, we tend to project our determined response into the crowd, to identify their reaction with ours. This projection so distorts our perception that minimal cues from others affect us with marked facilitating effect; it may in a few instances itself facilitate.

It becomes manifest, then, that social facilitation is a phenomenon intimately allied with suggestion. The relationship may be epitomized under three heads: (1) social facilitation is prerequisite to the success of suggestion in that it renders individuals in a group more highly suggestible by inhibiting those critical attitudes which must be broken down before suggestion can operate; (2) suggestion prepares the setting for a response, conditions the particular character of that response, which is then liberated and intensified by social facilitation; (3) social facilitation is, in its larger sense, identical

[7] That both perception and recall are affected by a given person's experience through the selection of particular features in the perceptual pattern has been notably demonstrated in the experiments of F. C. Bartlett; cf. *Remembering* (Cambridge: Cambridge University Press, 1932). Muzafer Sherif's work, reported in *The Psychology of Social Norms* (New York: Harper and Brothers, 1936), reinforces this tenet.

with autosuggestion since through recalled experience and through projected responses it functions in controlling our attitudes and in determining the nature of our responses as well as in releasing and augmenting them. Although this last relationship may be disputed on the ground of definition of terms, such objection becomes negligible in the light of the fact that in function, if not in process, social facilitation and suggestion sometimes merge.

Now to discern the role of social facilitation in persuasion we must distinguish four different quantitative levels of audience — and therefore four different types of persuasive medium: (1) the single-person audience, (2) the small audience, (3) the medium-sized audience, and (4) the large audience. Save between the first two, lines of demarcation, in terms of actual number of persons, are difficult to draw. Probably there is little necessity for drawing them, since the physical configuration of the group is always less important to the persuader than its psychological configuration. On the latter basis some differentiating characteristics can be adduced: chief of these is amount of interaction, which varies inversely with the number of individuals. The small audience may well be labeled the discussion group and its upper limit set at that of effectual discussion-group size — whatever that may be, as fixed by time and place and by the purpose of personnel of the group.[8] For the small group, whether assembled for purposes of collective thinking or of collective listening, incorporates the possibility of expressive interplay of ideas and actions. Even if there is but a single speaker delivering a semi-formal address, there is more opportunity for the asking of questions and of oral reaction to the persuader's ideas; in the small class the instructor will sometimes find his lecture interrupted by a student query, but in the larger lecture section the student "comes up after class." The medium-sized group, on the other hand, even though it be witnessing a panel, even though it be listening in order later to share in an open forum, because of its lower potentiality for general interaction, becomes predominantly a nonparticipating rather than a participating group, and in it unified coacting, rather than diversified face-to-face, relationships prevail. The difference between

[8] Probably most persons versed in discussion theory and practice will concur in R. H. Simpson's view that arbitrary limits cannot be set, that optimum size depends on purpose, time available, and amount of unevaluated information; cf. *A Study of Those Who Influence and of Those Who Are Influenced in Discussion*, Contributions to Education, No. 748 (New York: Bureau of Publications, Teachers College, Columbia University, 1938), pp. 26-27.

the force of social facilitation in persuasion in each of these two groups, then, is this: in the small group — usually a participating group, always a potentially participating group — although there exist more social stimuli, they are more varied and complex stimuli and are therefore less likely to be effectively facilitating; in the medium-sized group — usually a nonparticipating group, always a more highly polarized group — there exist within the perceptual range of the individual fewer social stimuli perhaps, but because they are under the more dynamic control of unchanging leadership they are simpler and less varied in character and are therefore more likely to be facilitating in group behavior. In the small group — in the jury, for example; in the intra-debate squad discussion — we argue more with one another, we disagree more and pursue more readily our avenues of disagreement; there is less pressure on us to fall in line with the group trend. Ideally, of course, discussion and persuasion are antithetic; in the ideal discussion group which aims at a composite solution based on collective solving there is no persuader, there is only the sharer. Until more effective discussion techniques are evolved, however, we must continue to concede that in most discussion effort there is, in practice, an admixture of persuasion; until real methods are exposed for collective problem-solving, we shall continue to depend upon key individuals bringing their solutions to the discussion and attempting in resultant debate to prevail. The point for the persuader here, practically or ideally, is that so far as the supporting force of social facilitation is concerned he will find his task easier in the medium-sized group than in the small.

In the large audience social facilitation plays its most vital role; it is this type of audience which most closely resembles the crowd. It differs from the crowd primarily in that it is institutionalized, has a more definite physical and psychological structure.[9] If the persuader is to control the large audience, he must make its behavior approximate that of the crowd. This he does through polarization, making himself the primary source of stimulation of the mass, the mass itself the secondary source.[10] And in this process social facilitation is the catalytic agent: for homogenizing the group with

[9] Kimball Young, *Social Psychology* (New York: F. S. Crofts and Company, 1930), pp. 537-538.

[10] Madison Bentley, "A Preface to Social Psychology," in "Studies in Social and General Psychology from the University of Illinois," *Psychological Monographs*, XXI (No. 92, 1916), pp. 20-22.

respect to the persuader's purpose is a matter of carefully placing emotional appeals which will elicit overt responses from some, these in turn facilitating similar responses in others as the influence diffuses throughout the group. Intellectual appeals are held by Allport to be of little value, since in general they stimulate covert reaction incapable of facilitating group response.[11] Although this is largely true, it is equally true that such overt concomitants of the act of acceptance or belief as the nod of the head may release prepared responses in others. That such appeals are of less value than emotional excitation, however, is confirmed by the fact that the latter is directed to a common basis of experience which emotionally human beings share, whereas intellectual appeals must encounter diverse attitudes and interests.[12] So it is through emotional overtones that overt responses, social facilitation, and polarization work; when the process is complete, the organic whole is prepared to be persuaded. The function of social facilitation in the large audience, then, is to remove social inhibitions, to release attitudes normally censored by group-sanctioned patterns of behavior, to allow so-called "human" nature free rein, to allow the individual to behave "just as he would behave alone, *only more so.*"[13] It destroys complex intellectual and volitional control of one's behavior, substitutes simple, elementary, emotional control; it makes suggestion in large groups possible; it makes persuasion possible. And as the persuasion progresses, it continues to exert an increasing force on the receptivity and acceptivity of the audience.

In the single-person audience, i.e., in the interview medium or what might be termed mutual conference as opposed to the common conference of the small group, there is of course no social facilitation save that induced by perception of inanimate objects and of imaginal cues. The enticing label may facilitate the salesman's persuasion, and recalled pleasant experiences with a given product may stimulate resale if the salesman can but bring them to consciousness; but in a strict sense, the persuader himself is the sole facilitator, the sole source of stimulation. Here, therefore, it is not the presence but the absence of social facilitation that is important; for when the persuader has uncontested control over the reactions of the individual, he has prepotent, though unabetted, direction of the per-

[11] Allport, *op. cit.*, pp. 300-301.

[12] Jon Eisenson, *The Psychology of Speech* (New York: F. S. Crofts and Company, 1938), p. 199.

[13] Allport, *op. cit.*, p. 295.

suasive process. Is it, then, easier or more difficult for him to persuade? This query poses the most striking problem presented by the picture of social facilitation in persuasion.

The problem submits a seeming paradox. In persuasion, classes of stimuli are operative in three general directions: (1) from the persuader to the persuadees, the linear response; (2) from the persuadees to the persuader, the circular response; and (3) from persuadee to surrounding persuadees, the socially facilitated response. This last type of response is an important part of the whole process in that it renders the persuader's task simpler, easier; by eliciting the desired overt reaction from a few members of the group he can actuate many, or by evoking overt concomitants of the act of acceptance or belief in a few individuals he can induce acceptance by many. Social facilitation enables him to persuade with maximum effectiveness and with minimum expenditure of time and effort. It would follow then that he should seek a large audience for his persuasion. Yet not always does he do so: sometimes he deliberately chooses the single-person audience as superior for his purpose; often he deliberately rejects the powerfully ancillary force of social facilitation. The salesman avoids the crowd, prefers the interview medium; even if he prepares individuals for the sale by a mass sales talk, he chooses to consummate the sale by individual solicitation. The preacher appeals for contributions in his Sunday-morning sermon; but for the actual signing of the pledges there is a personal house-to-house canvass in the afternoon. The teacher may frankly discuss stage fright with his entire class; but to solve inspirationally the particular emotional problems of particular students, he calls them in for individual office conferences. The absence of social facilitation may be more desirable at times than its presence.

In resolving this paradox we discern two hypotheses: (1) either the interview or the audience is the inherently better persuasive medium; or (2) in any given situation either the interview or the audience is the better medium, with the elements of that situation as determinants of the proper choice of medium. If the former is true, then we must assume either that the persuader who elects to use the interview is unwise in his choice (the success of the interview in salesmanship renders this unlikely) or that those who use the audience medium do so at the expense of efficiency but with a gain in economy. Now it may be true that the interview is inherently superior. It may be true that the politician addresses large audiences in his constituency because to approach each constituent individually

would be expensive of time, and his persuasive task is temporally restricted; if he were running for mayor in a town of one hundred persons he might do his campaigning as he met his neighbors on the street and in their homes. The secret of success in modern radio political persuasion lies in the creation of the illusion of the interview; the flourishing radio address is designed to embody linear appeal to single persons and small groups in the homes, even though the appeal be delivered simultaneously to millions of such persons and groups. It may be that mass communication is a deterrent in effectual persuasion and that social facilitation is most conspicuous when it is absent.

This is difficult universally to believe, however. It appears more judicious to accept the second hypothesis, since in making the situation the determinant we take more inclusive cognizance of the sundry exceptions which would harass any assertion that either extreme in medium is inherently superior to the other. Moreover, even if mutual conference could be proved universally a more propitious setting for persuasion, its costliness in time and effort would impel us to seek situations in which the audience might profitably be employed. If then the elements of the situation are to ordain the limitation or extension of the medium, what are the general determinants of the selection? What are the principles in the light of which the persuader should call upon the motive force of reciprocal influence?

Before advancing our first principle it must be pointed out that in most group situations there is existent and influential a force, repugnant to social facilitation, which may be called social impedance. Various distractions of physical environment and of neighboring personalities, visible or audible demonstration of antipathetic emotions or inhibiting actions, may operate as nonfacilitating or impeding stimuli; perception of such impeding overt responses will serve to obstruct the desired reaction and discharge its opposite. A person who in order to count must count on his fingers, for example, will be a socially impeding factor in a group taking a mathematical examination; a noisy radiator, a clanging bell, may effect reactions inimical to the persuader's purpose. There appear to be various individual differences in susceptibility to the responses of others. Some individuals, notably those hypertonic or introverted or reclusive,[14] succumb to the impeding stimuli, sense the facilitating cues without perceiving them. Others, relegating distracting elements to

[14] Allport, *op. cit.*, p. 248. Stutterers react thus: cf. L. E. Travis, "The Influence of the Group upon the Stutterer's Speed in Free Association," *Journal of Abnormal and Social Psychology*, XXIII (April-June, 1928), pp. 45-51.

the background of the perceptual pattern, yield only to facilitating signs. Indeed, this fact was used to furnish an early explanation of social facilitation: the individual, Meumann contended, must concentrate so fully in order to offset the distracting features of co-acting activity that he succeeds in producing an increment.[15] In general, then, on whether the presence of others will provide facilitating or impeding cues depends the persuader's choice of medium; the present or potential attitude of the group toward him and toward his message is the most significant determinant. If the group is friendly or acceptive or receptive, he will use as large an audience as possible, since there will be a positive correlation between the number of persons diffusing facilitating signs and the character of the total group response. If the group is hostile or highly skeptical, he may better choose the interview, since — though the process of conversion will require duplication of time and effort — he will be able to substitute for the impeding group cues his own facilitating ones. If the group is largely neutral, his choice will be ordained by the attitude of the few key individuals in the group who will determine whether the predominating group stimuli are to be facilitating or impeding.[16] This is one of the few principles of social facilitation in persuasion which have been substantiated by actual experiment: Knower's study demonstrates rather conclusively the superiority of the interview in reducing the hostility of attitudes:

> That there was a greater change in the alone than in the group situation brings experimental verification to the frequently expressed theory that the best way to change a negative to a positive public opinion is through the use of individual work. Again it should be pointed out that conclusions cannot be drawn from these data regarding the most effective mode of procedure when the purpose of the speaker is not so much to break down counter attitudes as to build up or release attitudes which already exist in mild degrees of intensity in the subjects addressed. This latter situation is the one which usually exists when the purpose of the speaker is to stir up a mob reaction. In such a situation group appeals may be more effective in that the direction of social facilitation is then in support rather than counter to the direction of the appeal presented.[17]

[15] W. H. Burnham, "The Group as a Stimulus to Mental Activity," *Science*, XXXI (May 20, 1910), p. 764.

[16] Probably this principle is correlated, to some extent, with age—young people being more suggestible, more receptive, more prone to group influence; older persons, more skeptical, more experienced, more critical, requiring individualized motivation.

[17] F. H. Knower, "Experimental Studies of Changes in Attitudes: I. A Study of the Effect of Oral Argument on Changes of Attitude," *Journal of Social Psychology*, VI, p. 334.

Another revelation of this study, the superiority of the interview when the persuasion is directed toward the female sex, becomes highly interesting when we consider it in relation to the salesman's patent preference for the interview and the fact that women purchase three-fourths of the goods brought into the home: [18]

> On the average a slightly greater change is produced in the alone than in the together situation in both sex groups. There is relatively a much greater change in the alone situation for women's than for men's groups. In the dry group, in fact, the men make a slightly greater change in the audience situation. It would appear, then, that particularly in attempts to motivate changes of attitude in women it is important to work with subjects individually. It may be that, if women are more sensitive to social stimulation than men, the presence of other auditors with attitudes which are negative to the direction of the appeal causes women to be more responsive to this negative social facilitation than men would be. On the other hand when only a speaker making a positive appeal is present in a room with them, the direction of the only social facilitation which exists is positive in nature, and therefore the response in a greater number of cases is positive.[19]

A second determinant lies in the requisite appeals to be employed in the persuasion. It is true that predominantly emotional appeals are more effective for the purpose of polarizing a large audience since they affect a wider common basis of experience. It does not necessarily follow, however, that logical appeals are ineffective in the group; nor does it follow that logical appeals are more effective in the interview. It may be that logical appeals are relatively less effective in the audience than in the interview. Allport's experiment in the writing of refutations showed an increment in quantity but a decrement in quality in the group.[20] The conditions of this experiment, however, were more likely to produce a higher type of reasoning than is normally found in audience reaction; on the plane of rationalization perhaps the group may do well. At any rate, Knower's findings (aside from indicating perhaps why successful salesman experience difficulty in the composition of good public address) support neither of the above theses, and his experiment has the advantage of testing the true interview instead of the completely alone situation:

[18] A. J. Snow, *Psychology in Business Relations* (New York: McGraw-Hill Book Company, Inc., Second edition, 1930), pp. 92-93.

[19] Knower, *op. cit.*, p. 340.

[20] F. H. Allport, "The Influence of the Group upon Association and Thought," *Journal of Experimental Psychology*, III (June, 1920), pp. 175-179.

> . . . it might be expected that persuasive speaking would be relatively more effective in the group situation and that logical speaking would be relatively more effective in the alone or face-to-face situation. What we find is evidence which suggests that in the alone situation there is much less difference than in the group situation in the effect of the speeches of the two types. The immediate presence of the speaker in the alone situation seems to make much less important the type of argument used. In the group situation, on the other hand, the auditor seems more free from the immediate personal domination of the speaker's personality and his arguments become a more vital factor in determining a change of attitude. That is, it is much more important to have a good speech, whether logical or persuasive, in a group than it is when the subjects are alone with the speaker. We find also that whether the speaker used logical or persuasive argument, he may expect to be more effective in the alone than in the group situation. These data give no indication that either type of argument is particularly more effective than the other in either social situation.[21]

What is important is the requisite specificity of appeal. In homogeneous groups, or in heterogeneous groups capable of being rendered homogeneous with respect to a particular purpose, where the speaker's aim is to intensify beliefs or to liberate beliefs on the threshold or to change broad attitudes and beliefs in a very general sort of way, where the appeals will be general and universal, the persuader will choose the audience as best suited for his purpose. If, however, the nature of the persuasion, in order to be successful, demands specific and highly individualized appeals to particular individuals' wants, then he will choose the interview. A large audience may be persuaded that shoes are essential to children's health, that many children in the community lack shoes, that money should be contributed for the purchase of such shoes, because the appeal is a broad, generalized, extensive altruistic one. To sell a pair of shoes to a given individual for his own use, however, involves intensive adaptation of appeal, specific relation of the attractive features of the shoes to the desires and needs of that individual for health, comfort, appearance, style, etc. In Allport's experiments with socially facilitated free chain association there was manifest a decrement in personal associations formed in the group and an increment in words derived from the immediate surroundings,[22] indicating that the individual is less concerned with personal matters and more conscious of his physical and psychological environment while he is in the group; if then persuasion demands that he focus his attention on his personal needs, he should do so without impeding social stimuli.

[21] Knower, *op. cit.*, pp. 336, 339.

[22] Allport, *op. cit.*, pp. 167-168.

The final determinant involves the stage of the persuasive process. Although a continuous entity, normally in practice this process evolves through five stages as the persuader's purpose is progressively enlarged: (1) attention, (2) interest, (3) conviction, (4) desire, and (5) action. If any one of these steps is omitted or minimized in the process, it is so neglected because its objective has already been achieved and is therefore implicit in and an integral portion of the total persuasive phenomenon. Now in the early stages of persuasion, especially the first two, social facilitation is a helpful force, and mass appeals are economical and effective. Here advertising becomes the handmaiden of salesmanship, preparing the nature of the response; here the sermon precedes and prepares for the confessional; here the radio campaign gives impetus to the work of the ward heeler. But as we continue toward the end of the process, our first two determinants become operative, and the relative weight of the attitude of the group as opposed to the necessity for specificity of appeal will adjust the persuader's dilemma. Hollingworth, in delineating five types of audience, designated the relationship between polarization of the group and the persuasive process. The pedestrian audience must be rendered attentive, must be interested, impressed, convinced, and directed. The passive audience necessitates only the last four of these steps, the selected audience the last three, the concerted audience the last two, and the organized audience solely that of direction.[23] So as orientation increases, as social facilitation intensifies, as the response approaches the threshold, fewer social stimuli are necessary to liberate that response; as hostility wanes, social facilitation becomes increasingly helpful. If, then, the appeals are general and universal, motivation will be aided by the presence of the group. If, however, it is essential that appeals to dynamic wants be specific and individualized to create desire and motivate action to satisfy those wants, then, in spite of the leverage of social facilitation, it will be safer to persuade in the interview.

It is the particular objective of the persuader, in relation to the stage of the persuasion, the attitude of the persuadee, and the requisite specificity of appeal, that guides his decision to accept or to reject the ancillary force of social facilitation.

[23] H. L. Hollingworth, *The Psychology of the Audience* (New York: American Book Company, 1935), pp. 21-25.

WALT WHITMAN'S INTEREST IN PUBLIC SPEAKING

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WHEN the second edition of "Leaves of Grass" was issued, Walt Whitman and the publishers were threatened with a suit for obscenity. One bookseller was so indifferent to the sales of the volume that when Henry Ward Beecher wanted to buy a copy, the bookseller did not know the price. When the bookseller asked Walt Whitman what price should be put on the book, he was told to give Henry Ward Beecher a copy free. In spite of this reception of his book, Walt Whitman was determined that the public should know more of his message. To this end, he decided to utilize the platform. In this paper it will be shown that Walt Whitman's interest in the spoken word was lifelong, that this interest influenced his rhythmic chant, as it was called, that Walt Whitman knew Robert G. Ingersoll very well and that he had an interest in other orators, that he helped support himself during his declining years by means of his address on Abraham Lincoln, that he gave lecture-recitals from his own and other poets' works, that he made copious notes for lecturing and set down his ideas on the art of public speaking, and that he wrote a poem on a subject that was very near his heart.

Walt Whitman's ideal school would include the study of conversation and declamation. Perhaps his decision to include this discipline along with a study of love, the love of women and all manly exercises, is due to his own training in debating societies when he was in his teens. He also declaimed stormy passages from Julius Caesar and Richard III as he rode the New York busses. His love of the spoken word made him a constant attendant at the theatre in New York where he heard all the great ones of his time,—Kean, Macready, Ellen Tree, Hackett, Fanny Kemble. He said of Mrs. Kemble, "that was the name to conjure up great mimic scenes withal — perhaps the greatest. I remember well her rendering of Bianca in *Fazio* and Marianna in *The Wife*;" of these declamations and visits to the theatre, Walt Whitman said, "I suppose the critics will laugh heartily but the influence of those Broadway jaunts and drivers and declamations and escapades entered into the gestations of *Leaves of Grass*."

The critics have not laughed heartily but have taken Walt Whit-

man at his word and have studied his rhythms for the purpose of cataloging them. Bliss Perry has suggested that the rhythms are those of oratorical prose, "nearer the recitative than the aria. Yet neither pure declamation nor pure song." Constance Mayfield Rourke suggests that listening to the oratory of Henry Ward Beecher may have had an effect upon the rhythms of *Leaves of Grass*. In a letter to me Miss Rourke wrote:

> I have always considered the parallels which I established between Beecher and Whitman of some importance; and I was glad to have them stressed in a review of *Trumpets* as a fresh contribution to our knowledge of Whitman by Professor Vernon L. Parrington; he has used the parallel in his third volume of *Main Currents*.

In a letter to Walt Whitman, Hamlin Garland pointed out that reading aloud helped to make the meaning of *Leaves of Grass* clear. "I have demonstrated that there is no veil, no impediment between your mind and your audience, when your writings are voiced. The formlessness is only seeming, not real." When Walt Whitman was read this by Horace Traubel, he cried out, "That's a point to chew on! Read it again: I want to get it clear in my noodle for keeps." Similarly, Robert G. Ingersoll believed that Walt Whitman had to be read aloud to be appreciated. When told of Ingersoll's observation, Walt Whitman exclaimed, "How so? What did the Colonel say?" Ingersoll had said, "That all great literature lent itself to the lips — that you were never so impressive as when rightly read aloud." Walt Whitman interrupted with, "Did he say that? How interesting that is. Is that all he said?" Horace Traubel told him, "No — not all. He said that he often argued with people about you — that argument most times did not have much effect. He said that when he found his arguments were making no impression, he resorted to your book and read from it, that the argument of the book, given in that way, was many times conclusive." Walt Whitman exclaimed, "How fine! And that is probably what Garland meant, too. I shouldn't wonder but it's all true. That is a striking theory of the Colonel's, 'All great utterance in literature lends itself to the lips.' I shall never forget that — it is very startling, incisive: it's not difficult to remember anything expressed with such piercing directness."

Of all the orators Walt Whitman knew, he was most fond of Robert G. Ingersoll. On June 2, 1890, Ingersoll attended a birthday party given by some thirty-five of Walt Whitman's admirers. After working all day in his New York law office, Robert G. Ingersoll

went over to Camden and after the supper he dwelt upon his debt to Walt Whitman. In extravagant words, the reporter describes Ingersoll's speech.

> The great feature was Ingersoll's utterance. It was probably, in its way, the most admirable specimen of modern oratory hitherto delivered in the English language, immense as such praise may sound. It was forty to fifty minutes long, altogether without notes, in a good voice, low enough and not too low, style easy rather colloquial (over and over again saying "you" to Whitman who sat opposite) sometimes markedly impassioned, pulsating and swaying like a first-class Andalusian dancer.

Walt Whitman said that this speech was the cap sheaf of all commendation he had ever received. So impressed were Walt Whitman's friends with this tribute that they arranged to have Ingersoll give a lecture at Horticultural Hall in Philadelphia on October 21, 1890 as a benefit for Walt Whitman. Bliss Perry tells us that this was Walt Whitman's last appearance. The poet had been wheeled on the stage in an invalid's chair, and at the conclusion of Ingersoll's fervid oratory, the bard said a few words of thanks to the audience and was wheeled back to a half-lighted dining room in a nearby hotel where he sat late with Ingersoll munching a little bread dipped in champagne and talking about Death. The lecture netted $1000 for the grey poet.

The friendship of Ingersoll for Walt Whitman was climaxed with Ingersoll's participation in the last sad offices for the dead. On March 30, 1892, Ingersoll hurried back from Canada to pay his last tribute to his friend. Of his tribute, The New York *Herald* of March 31 remarked,

> Death touched him very close when it touched Whitman. There was intense silence when Colonel Ingersoll arose, and in those glowing periods for which he is world famous, scattered flowers of speech over the ashes of his friend. When the great orator had spoken—and his words dwelt on the ear like rich music—there was nothing to do but consign Walt Whitman to his tomb, and this was done without parade or ceremony.

There are more references to Ingersoll in Traubel's account of his days with Walt Whitman in Camden than to any other orator. Whitman was drawn to Ingersoll by his simplicity; and Ingersoll gave fully of himself to his friends. Whitman thought Ingersoll's funeral orations were masterpieces of their kind. After reading one of them, he said, "Ingersoll has what I call a genius for such a function; all his funeral addresses are marvels of beauty, — short, musical, rich in cadence, pithy, never too much, never too little and the best part of Ingersoll is, — I don't think anybody ever loses interest

in him who hears him speak — ever goes to sleep — ever goes woolgathering to other scenes in his presence. He is one of the few — very select few — who are alive and keep others alive with them."

Next to Ingersoll, Whitman admired Henry Ward Beecher, although the Plymouth pastor and the grey poet never became very close friends. Whitman did not have much use for preachers, because preachers did not have much use for him: "Ministers are rarely friendly to me." Whitman did not think of Henry Ward Beecher as a preacher; there was so much of him man that there was very little left to be minister. Whitman says that when the new Plymouth Church was being built he heard Beecher and records his admiration, "He hit me so hard, fascinated me to such a degree that I was afterwards willing to go far out of my way to hear him talk." Lyman Abbott, who followed Beecher in the Plymouth pulpit, was like "a theatre storm — after a real storm out-of-doors." Whitman believed that Beecher was a great admirer of *Leaves of Grass,* and that perhaps unconsciously had absorbed much of its doctrine in his own preaching. A few years before Beecher's death in 1887, the two men met at the ferry. Whitman's admiration for Beecher is apparent in the following record of Horace Traubel.

> Something got us talking of Beecher. I met Beecher a number of times—half a dozen at least—once right here in Camden, at the ferry. He was to lecture one night at Freehold (it was two or three years before he died) had an hour of waiting at the West Jersey station. I met him there in that casual way—we had a good talk. We were at it probably half an hour. He was more than commonly cordial, and I hope I was, too, for I felt more than commonly drawn to Beecher. I have heard it said of him, as it was said of Tennyson—that he would not go out of his way for a king which means that if he pays you any attention he means it. Beecher was a friend of the Leaves from the first—even applied himself to it I am told. He said to me this day that his first feeling about the Leaves had not vanished—had been rather accentuated.

Wendell Phillips sent money to Whitman to help him with his work in Washington during the Civil War. Whitman states that while Phillips thought that slavery was the one crying sin of the universe, he himself did not. Whitman looked at Phillips with a kind of awe. Of him he said, "He was haughty, noble, powerful, but without Ingersoll's jovial reactions. He never spoke but to cut — cut somewhere: with a keen blade, infallibly cut." On another occasion, he said, "I think the best part of Phillips was in the asides and digressions."

In his editorial of April 11, 1846, Whitman condemns Daniel Webster for his private character, for his acceptance of charitable

purses made up for him by his speculating and political friends to be repaid by his official aid and favor. "A cynical, bad, corrupt man — distrustful of the people, and therefore distrusted by them." Webster, Whitman claimed, was indebted to the brandy bottle for his indignant eloquence and to the ill-got funds of Whig brokers for the supplies of his pocket-book. Of his oratory, Whitman declared, "I heard Webster often — heard him deliver some of the greatest of his political speeches. The effect he had on me was more of grandeur of manner, size, importance, power — the breathing forth of these — than of things said, anything said."

Although Whitman never did take up his proposed scheme of advertising himself and his book by means of lectures, of which he had written many, "barrels of them," he did write a lecture on Abraham Lincoln which he gave many times. The exact number of times is indeterminable but here are a few of the dates: New York, April 14, 1879; Philadelphia, April 14, 1880; Boston, April 14, 1881, when he visited Longfellow. In 1886, when he was receiving very little from royalties, Talcott Williams arranged for a lecture on Abraham Lincoln at the Chestnut Street Opera House in Philadelphia which netted $692. On April 15, 1887, Walt Whitman delivered the lecture in Madison Square Theatre, New York. Mark Twain, John Hay, James Russell Lowell, St. Gaudens, Edmund Clarence Stedman, and other prominent persons attended, including Andrew Carnegie who paid $350 for a box. The total proceeds were $600. In 1890, he delivered the lecture before the Contemporary Club.

The opening sentences of this address will give an idea of his composition for speaking and of his admiration for Abraham Lincoln.

> How often since that dark and dripping Saturday—that chilly April day, now fifteen years bygone—my heart has entertained the dream, the wish, to give of Abraham Lincoln's death, its own special thought and memorial. Yet now the sought-for opportunity offers, I find my notes incompetent, (why for truly profound themes, is statement so idle? why does the right phrase never offer?) and the fit tribute I dreamed of, waits unprepared as ever. My talk here indeed is less because of itself or anything in it, and nearly altogether because I feel a desire, apart from any talk to specify the day, the martyrdom. It is for this, my friends, that I have called you together. Oft as the rolling years bring back this hour, let it again, however briefly, be dwelt upon. For my own part I hope and desire, till my own dying day, whenever the 14th or 15th of April comes, to annually gather a few friends, and hold its tragic reminiscence.

The descriptive power of Walt Whitman is apparent in the following paragraph.

> A moment's hush—a scream—the cry of *murder*—Mrs. Lincoln leaning out of the box, with ashy cheeks and lips, with involuntary cry, pointing to the retreating figure, *He has kill'd the President.* And still a moment's strange, incredulous suspense—and then the deluge!—then that mixture of horror, noises, uncertainty—(the sound, somewhere back, of a horse's hoofs clattering with speed)—the people burst through chairs and railings, and break them up—there is inextricable confusion and terror—women faint—quite feeble persons fall, and are trampled on—many cries of agony are heard—the broad stage suddenly fills to suffocation with a dense and motley crowd, like some horrible carnival—the audience rush generally upon it, at least the strong men do—the actors and actresses are all there in their play-costumes and painted faces, with mortal fright showing through the rouge—the screams and calls, confused talk—redoubled, trebled—two or three manage to pass up water from the stage to the President's box—others try to clamber up—etc., etc.
>
> In the midst of all this, the soldiers of the President's guard, with others, suddenly drawn to the scene, burst in—(some two hundred altogether)—they storm the house, through all the tiers, especially the upper ones, inflam'd with fury, literally charging the audience with fix'd bayonets, muskets and pistols, shouting *Clear out! clear out!* you sons of ——— . . . Such the wild scene, or a suggestion of it rather, inside the play-house that night.

It is strange that this address has not been drawn upon more by writers of text-books on public speaking for examples to illustrate principles of composition.[1] The address is a fruitful hunting-ground for rhetoricians, for Walt Whitman was a serious student of the theory of public speaking.

At the conclusion of his lecture on Abraham Lincoln, Walt Whitman often delighted his audiences by reading to them some of his own poetry and some selections from other poets. The book from which he read he called his "Reading Book;" it is now in the Library of Congress. Among other poems this scrap book included "The Diver" by Schiller, "John Anderson, my Jo," "The Battle of Naseby," "The Bridge of Sighs," "Ode on the Passions" by Collins (there is an outline of the Collins "Ode," written in pencil, pinned to the printed poem, evidently prepared by Walt Whitman for memorizing aid), "The Raven" by Edgar Allen Poe, "The Sailor's Wife" by W. J. Mickle, "The Midnight Visitor" (translation from the French, "La Ballade du Desperé") by Henri Munger, "The Midnight Visitor" (from *Anacreon*). The name of the translator

[1] J. M. O'Neill and A. T. Weaver in *The Elements of Speech* use a paragraph from this address which they in turn quoted from S. H. Clark's *Interpretation of the Printed Page.*

is not given. It appears to be the translation of Thomas Moore (*Odes of Anacreon,* Philadelphia, 1804, 153, Ode xxxiii). It is changed in many places from the printed reading by Walt Whitman's emendations. From his own works he included, among others, "Thou Who Has Slept All Night Upon the Storm (The Man-of-War Bird)," "The Singer in the Prison," "The Whale Chase," "O Captain! My Captain!," "The Mystic Trumpeter" and "Proud Music of the Storm."

As has been suggested, Whitman was a student of the problems of composition and delivery. In consonance with his belief in the "daemonic" theory of inspiration and execution, Walt Whitman wrote notes along the margins of his lectures to autosuggest himself. His suggestions to himself are sometimes so explicit as to be amusing, as for instance when he said, "fiercely and with screaming energy." Clifton Joseph Furness in commenting on this characteristic of Whitman's preparation for speaking says, "The variety of striking devices used to catch his own attention at some future re-reading, and to underscore the pregnant points of some particularly rich gleaning of ideas, can hardly be conveyed to the reader even by a photographic reproduction of the poet's memoranda. Different colored pencils and ink, and a wide variation of style of printing and writing, as well as technical typographical indications, are constantly utilized. The frequent use of hands drawn with index finger pointing to a 'lead' are especially revelatory of the 'third personal' objective attitude of Walt Whitman toward his creative Self."

In spite of his "daemonic" theory of inspiration, it was Whitman's practice to write and rewrite, cut and revise his material. Traubel gives a report of a conversation he had with Whitman on this matter. "That," said Whitman, referring to a piece of writing, "is a piece of inborn oration, it was to be a burst, but the bomb never exploded — though I don't know but that the substance of it got into the book somewhere anyhow." "You often gave yourself advice on paper," said Traubel. "I suppose I did: I wrote things down. I saw them better in my handwriting than in my mind's eye — could tell better whether they enticed me or not," said Walt Whitman. "Ingersoll once asked me," Traubel continued, "whether your writing was pretty well finished before you wrote at all or whether you wrote mainly and revised on paper. I told him I thought you made lots of use of pens, inks, and papers." Walt Whitman smiled and assented, "So I do — So I do. Your answer was the answer I would have made myself."

The speaker in giving his message, Whitman believed, should be inspired and divinely possessed and blind to all subordinate affairs and "given up entirely to the surgings and utterances of the mighty tempestuous demon." The speech situation is an "agonistic" arena where the speaker wrestles and contends with his audience; he suffers, sweats, and undergoes his great toil and "ecstasy" with them.

Walt Whitman believed that the speaker should think the thought, should restrain all impulses to gesture, — except the irresistible ones. He should be careful to return his arms to his sides after gesturing. "Animation and life may be shown in a speech by great feeling in voice and look. Interior gesture, which is perhaps better than exterior gesture." This flowing forth of power from the speaker will be apparent to the audience without too many gestures. "A subtle something equivalent to gesture and life plays continuously out of every feature of the face and every limb and joint of the body, whether active or still." On the stage Walt Whitman preferred the "mental style" of acting as performed by Macready in his early days to the boisterous, stormy, physical style which is "repugnant to truth and taste." In order to express the thought adequately the speaker should develop his body and voice to respond to the thought.

Walt Whitman's notes on oratory indicate that he had a fresh point of view in regard to the purposes of oratory for his time. He wanted oratory to promulgate the grand ideas of "American ensemble liberty, concentrativeness, individuality, and spirituality." He wrote in 1858 that he wanted to change the character of American oratory from that of "excessively diffuse and impromptu character it has (an ephemeral readiness, surface animation, the stamp of the daily newspaper, to be dismissed as soon as the next day's paper appears) and to make the means of the grand modernized delivery of live modern orations, appropriate to America, appropriate to the world." Walt Whitman admits that this is not an easy change to make and that it will take a "great leading representative man with perfect power, perfect confidence in his power, persevering with repeated specimens ranging up and down The States to accomplish it." Perhaps Whitman thought of himself as the possible man.

The main requirement of any lecture is to have one leading and simple idea adapted to popular comprehension without too much complication. The subordinate ideas should be kept down so that only one idea predominates. One ideal way to organize a speech is to have it broken up in parts with separate headings. This would be different from the connected, unbroken style of the times as seen

on the platform and in the pulpit. Single paragraphs should be shorter and more abrupt.

The style of prose for speaking is different from that of prose for writing. The speech should be elliptical and idiomatic. The delivery should be so "broad and spacious" as to make up for the elisions. The speech should not have too much in it nor should it be too complicated. The rhythm of prose for speaking should differ from the rhythm of prose for writing. "The trouble in Lecture style," Walt Whitman says, "is often the endeavor (from the habit of forming the rhythmic style of 'Leaves of Grass') involuntarily to preserve a sort of rhythm in the Lecture sentences . . . It seems to me this rhythm, for them is not only not necessary, but is often dangerous to their character-requirements — which, for speaking purposes, need to be abrupt, sometimes crackling, with strong contrasts." The style in speaking should be personal. "Besides direct addressing *to You*, another leading trait of Lectures may well be— strong assertion — ('I say.') — launched out with fire, or emphasis, or enthusiasm, or anger."

We catch another glimpse of Whitman's concept of what good public speaking should be from his editorials in the book, "I Sit and Look Out." Walt Whitman detested the lecturer who had nothing of himself to offer. The speaker should, like Curtis and Beecher, mingle their observations with their own thinking. Beecher was a lecturer who was worth his price. Whitman says, "A Lecturer is like a horse in one respect — a poor one is dear at any price." Whitman classifies lecturers into four groups: 1. Plagiarists. 2. The would-be witty lecturer, of all the most contemptible. 3. Those lecturers who have "a gift — for it surely can not be an art — of elaborately amplifying nothing into an indescribable, unintelligible entity, and talking grandiloquently for half an hour about it." 4. "But there is fortunately both for the public and for the lecturer tribe a fourth class, though far less numerous than it should be, who conscientiously labor to give the audience the worth of the money they have paid for admission. These select a tangible living subject — something that the public at large feel a veritable, *bona fide* interest in. And having selected such a subject, they do not 'cram' from popular treatises, merely to rehash without digesting the information they may have gleaned; but bring a vigorous practical understanding to bear on the subject, so as to present it in the most lucid form, accompanied by the most useful deductions and suggestions which occur to them in their meditations." Every teacher

of public speaking would agree that Walt Whitman has set an ideal standard for public speaking in his fourth category.

Further light is thrown upon Whitman's concept of public speaking in the following comment on the oratory of President Rutherford B. Hayes. In 1879, Whitman was making a tour of the West and happened to hear one of the speeches of the President. In the quotation we see Walt Whitman's appreciation of the conversational style of speaking, which was beginning to win ascendancy over the florid oratory of the earlier part of the century.[2] The close adaptation of the speaker to his audience is noted by Whitman and commended.

> To these addresses—all impromptu, and some would call them ephemeral—I feel to devote a memorandum. They are shrewd, good natured, face to face speeches, on easy topics not too deep; but they give me some revised ideas of oratory,—of a new, opportune theory and practice of that art, quite changed from the classic rules, and adapted to our days, our occasions, to American democracy, and to the swarming population of the West. I hear them criticised as wanting in dignity, but to me they are just what they should be, considering all the circumstances, who they come from and who they are addressed to. Underneath, his objects are to compact and fraternize the states, encourage their materialistic and industrial development, soothe and expand their self-poise, and tie all and each with resistless double ties not only of inter-trade barter, but human comradeship.

In this paper I have mereley scratched the surface of Walt Whitman's interest in public speaking; there is enough material for a doctoral dissertation. A fitting close to this paper might be a poem on public speaking which Walt Whitman included in *Leaves of Grass*, a further indication of his absorption in our medium.

VOCALISM

I

Vocalism, measure, concentration, determination, and the divine power to speak words;
Are you full-lung'd and limber-lipp'd from long trial? from vigorous practice? from physique?
Do you move in these broad lands as broad as they?
Come duly to the divine power to speak words?
For only at last after many years, after chastity, friendship, procreation, prudence, and nakedness,

[2] In this connection it is interesting that when, in 1883, J. W. Shoemaker published his *Practical Elocution* which is based on conversational directness, he said, "Conversation is the simplest and most common form of human expression. It contains the germs of all speech and action, and therefore constitutes the basis of oratorical and dramatic delivery. We exercise these germs of speech and action most in conversation; it is therefore natural that we should here form our most permanent habits of expression."

After treading ground and breasting river and lake,
After loosen'd throat, after absorbing eras, temperaments, races, after knowledge, freedom, crimes,
After complete faith, after clarifyings, elevations, and removing obstructions,
After these and more, it is just possible there comes to a man, a woman the divine power to speak words;
Then toward that man or that woman swiftly hasten all—none refuse, all attend,
Armies, ships, antiquities, libraries, paintings, machines, cities, hate, despair, amity, pain, theft, murder, aspiration, form in close ranks,
They debouch as they are wanted to march obediently through the mouth of that man or that woman.

II

O what is it in me that makes me tremble so at voices?
Surely whoever speaks to me in the right voice, him or her I shall follow,
As the water follows the moon, silently, with fluid steps, anywhere around the globe.
All waits for the right voices;
Where is the practised and perfect organ? where is the developed soul?
For I see every word utter'd thence has deeper, sweeter, new sounds, impossible on less terms.
I see brains and lips closed, tympans and temples unstruck,
Until that comes which has the quality to strike and to unclose,
Until that comes which has the quality to bring forth what lies slumbering forever ready in all words.

LOGIC AND PUBLIC SPEAKING

WILBUR E. GILMAN
University of Missouri

THROUGHOUT the history of rhetoric and public speaking, logical proof has held an important place both in theory and in practice. Aristotle considered it more important than ethical proof or pathetic proof. Today we tend to neglect logical proof in public speaking courses, and leave it for advanced courses in argumentation. Since a large majority of our students take only one so-called "service course" in public speaking, if they do not learn what logical proof is and how to use it in that course, they do not learn it at all.

My purpose is to present briefly this problem in the teaching of argumentative public speaking. If my impression is right, teachers of public speaking today may be classified roughly into three groups, according to which one of the three kinds of Aristotelian modes of persuasion they emphasize. There are those who emphasize the adjustment of the speaker to his speaking situation, of whom Professor

Murray may be regarded as a representative. There are those who emphasize the adaptation of material to an audience, of whom Professor Monroe may be regarded as a representative. And there are those who emphasize the finding of ideas for the development of the subject-matter to be presented, of whom Professor Winans may be regarded as a representative.

It is not my contention that any one of these aspects of speech preparation is unimportant, but it is my contention that the ancient theory of invention, or the finding, selecting, and organizing of ideas —the analysis and synthesis required for logical proof—is still the most indispensable part of our work as teachers of public speaking. When I say "indispensable" I mean that it should come first in the teaching procedure we use to train students to make effective argumentative speeches.

The issue is essentially: shall we teach our students to look first of all at the subject in terms of the persuasive purpose, or shall we teach them to look first of all at the audience and occasion in terms of relating themselves as speakers to the needs and expectations of a group of listeners assembled for a specific occasion, emphasizing either personal psychology or social psychology or both? Perhaps you will say that the speaker can give adequate attention to his subject at the same time that he is wrestling with the problems of personal and audience adjustment. That is precisely the position with which I disagree. The experience I have had with a large number of college sophomores and upperclassmen in public speaking leads me to believe that even if it is theoretically possible for students to analyze subject, speaker, and audience simultaneously, no better method has yet been devised to give full consideration to the requirements of logical proof than to brief the subject first and to adapt it afterwards.

The main question, then, is whether logical analysis and logical organization should not be taught as a separate stage in speech preparation preceding the stage of audience analysis and psychological adaptation. Since most college students are relatively untrained either in logic or in psychology, certainly in their applications to public speaking situations, there seem to be two strong reasons for this sequence: (1) that the adequate exploration of a subject in terms of an argumentative purpose followed by a careful checking of the validity of the inferences drawn is a sharp challenge in itself, even to the better students, and (2) that the development of a subject in terms of the speaker, the audience, and the occasion is so large a task that it calls for separate consideration. In other words, invention may be

treated in divisions—one division devoted to logical proof and another to pathetic and ethical proof. The results should in no way conflict. In fact, the second division, the psychological adaptation, will represent chiefly a modification of the first, the logical analysis. The audience analysis may reveal, for example, either that some sound arguments cannot be used because of strong fixed beliefs or personal interests, or that some or all of the arguments used must be presented in relation to the listeners' beliefs and interests, through the use of authority, example, or suggestion.

The objective in logical analysis and organization is the training of students to handle a subject intelligently and resourcefully, to see its implications and patterns of thought, and to distinguish valid inferences from fallacies and superficial associations. Students should come to realize the fundamental importance of logical proof even in elementary arguments. They should discover that assertion is not proof and that personal opinion is not convincing evidence.

For the purpose of making this study of the subject, the procedure may consist of (1) various schemes of logical analysis such as we have long known in rhetoric and steadily use in argumentation (stock issues, for example: Is the present situation in need of change? Is the proposed plan workable? Are there evils in the proposed plan worse than those in the present situation?) followed by (2) a deductive outline which can be tested for logical relationship by making each supporting statement a causal clause in relation to the main statement under which it appears. In this way students work out their material carefully and test it step by step for logical relationship. The deductive outline is a much more effective means of testing ideas for validity than is an outline presenting ideas in the order in which they may best appear for the speaker to accomplish a particular purpose with a particular audience.

This method of logical analysis is based deliberately on the syllogistic forms of the older logic, because of its value in analyzing and testing propositions, especially for the beginning student who may thereby discover, and perhaps avoid, some of the grosser fallacies. This method is, however, a means of speech *preparation* rather than a means of speech *presentation*. It is merely the student speaker's method for testing his own grasp of his subject, not a way of organizing material for an audience. The recent and current theories in logic, such as the implicative method of Bosanquet, the newer logic of Sidgwick, Dewey, and Schiller, and the techniques of Bogoslovsky, seem to have greatest value in application for the mature student who

has already become acquainted with the uses of the syllogism as a tool for his own speech preparation.

Even Mrs. Gladys Murphy Graham, who considers it unwise to separate the organization of ideas from the adaptation of those ideas to an audience, in her article in the QUARTERLY JOURNAL OF SPEECH for November, 1924, observed: "It is Bosanquet who has given to the philosophical world that alternate method, *implication* as distinguished from *linear inference*. He has not given it in a form in which it can be put into the hands of the debater, nor in a form in which it will be easily acquired by the public speaking teacher." [1]

In an article published in the QUARTERLY JOURNAL OF SPEECH in June, 1925, Professor Herbert A. Wichelns set forth four contentions drawn from this article by Mrs. Graham.[2] The first three, which are of interest in the present discussion, are as follows: "I. Argumentation has not fully assimilated logic; it has been content with the traditional logic and has used only fragments of this. II. The logic we actually use in the texts is not sufficiently guarded against the misapprehensions of students. They are allowed to fall into logical errors through the too condensed or the too elementary statements of logical principles in texts on argumentation. III. Those teachers who decry the woodenness of the traditional syllogistic logic have retained the syllogistic brief, itself a wooden instrument." In commenting on the third statement, Professor Wichelns says: ". . . what is the common brief but a device for separating what we think from why we think it? Is any one—teacher or students—in scrutinizing such a brief conscious of the implied syllogisms? Argumentation, in actual practice, gets along very well without the syllogism; it would not get along without the brief." Further on, Professor Wichelns explains that the rhetorical plan of a speech is not necessarily that of the brief. He comments: ". . . the order of arguments in a brief may be shifted in actual delivery; the brief cannot be expected to reproduce the color and tone of the reasoning; the 'appeal' is generally not found in the brief." Especially significant in our discussion is the following interpretation by Professor Wichelns: "Students do reason rather woodenly, do overuse such catch-words as 'practicability' and 'justice'; they do tend to deliver the brief rather than the speech made from the brief; they do neglect the whole economic situation with which they

[1] Gladys Murphy Graham: "Logic and Argumentation." Q.J.S. X, No. 4 (November, 1924), 350–363.

[2] Herbert A. Wichelns: "Analysis and Synthesis in Argumentation." Q.J.S. XI, No. 3 (June, 1925), 266–272.

are dealing—because they do not understand it. But perfection is not to be expected of any man, and certainly not of the undergraduate, who—naturally enough—has scant notion of the subjects he discusses, is new to logical method, and almost unconscious of rhetorical method. The laws of any art are a hindrance at first; they cause stiffness and awkwardness that may make both teacher and student discontented; but this impatience at the slowness of human development should not too readily be translated into discontent with those laws." Professor Wichelns recommends in our teaching the making of a distinction between the full brief or complete study of a question, the brief cut down for the purpose of a speech, which has often been called the outline, and the speech plan or guide to composition, which has often been called the rhetorical plan.

Since there seems to be no disagreement about the contention that syllogistic reasoning fails to present an adequate vehicle for adapting argumentative speaking to a particular audience, the real issue is whether or not we are justified in using an outline which proceeds from assertions to reasons as a means of training students to support their contentions in working out material for their speeches. This procedure is undoubtedly elementary, but my experience with undergraduates has led me to believe that it is necessary as a means of training students to realize that critical audiences will not ordinarily accept mere assertions. The better minds may be able to view the problem as a whole and to think in terms of proof and in terms of the audience at the same time, but certainly it will seem too difficult for the average undergraduate to keep these two problems in mind throughout his preparation. As a teaching device, it seems expedient to ask students to analyze the subject first, and the audience afterward. The changes in material made necessary by specific adaptation to a particular audience situation will be mostly in the choice of illustrations adapted to the particular knowledge, interests, prejudices, opinions, and beliefs of the audience to be addressed, but in some instances students should discover that some valid arguments are not available in dealing with an audience having a certain set of fixed beliefs. Other changes will be largely changes of arrangement. It seems probable that a student will be better able to answer questions about arrangement if he has his material in well-organized form before him as he considers these questions. If he knows exactly what the available arguments are, he will be better able to decide which one should come first and whether the audience will be more easily persuaded if the first one is developed inductively rather than deductively.

In her article entitled "The Natural Procedure in Argument" in the QUARTERLY JOURNAL OF SPEECH of November, 1925, Mrs. Graham protests: ". . . why would one put material into the storehouse of the brief when it would then be in a totally different shape and order from that in which one wanted to take it out again? To put the question perfectly clearly, why brief argument as a preliminary to a non-brief presentation of it?"

The answer to Mrs. Graham's questions may be found in the position taken by Professor John Dewey that a field of subject-matter has its logic, but people have their psychology. The problem of the public speaker is often that of translating the logic of his field into the psychology of his hearers. Essentially are there not separate tasks involved? Is there not actually an economy in considering the logic, the psychology, and the translation separately? Eventually, of course, this duality in the elementary learning process may disappear by the unification of the two procedures of orgnization and adaptation, as the student becomes more mature in his thought and more experienced in his speech preparation.

Since there is no disagreement on what is to be taught, the problem is how to teach it. Perhaps many find the single approach more satisfactory than what Mrs. Graham calls the dual method. In other words, they teach students to adapt their ideas to their audience as they work them out. The inferential method in organization followed by the psychological method in adaptation seems to have the advantage of systematic training, step by step; teaching students to do one thing at a time, to consider first one aspect of their problem and then another.

While I certainly am not prepared to make any dogmatic statement as to which method is preferable, I do say:

1. that I have found the division between logical and psychological approaches definitely useful to beginning speakers;

2. that I am inclined to recommend the procedure for the consideration of others; and

3. that I plan to continue the use of the procedure, unless I can be shown a teachable plan that eliminates separate consideration of subject and audience. The plans I have thus far seen have a vagueness about them that seems to make them impractical for beginning students in public speaking.

THE FORUM

THE WASHINGTON CONVENTION

MEMBERS OF THE NATIONAL ASSOCIATION:

If ever teachers of speech need to confer with one another and to agree on important objectives and policies, that time is now. National emergencies have always produced repercussions in the educational system. The time and place of our Silver Anniversary Convention could not have been better chosen to meet this need.

Here are four good reasons for each of us to go to Washington, even at a personal sacrifice:

1. *This is our Silver Anniversary.* We need to survey our past and plan for our future. James M. O'Neill will set this keynote in the opening address of the convention. I am informed "from reliable sources" that you won't want to miss it! Nor will you want to miss the other anniversary features of the convention, including the Association Luncheon.

2. *There will be a stimulating program.* John T. Studebaker, U. S. Commissioner of Education, will speak on "The Place of Free Discussion in American Life." Oswald Ryan, one of the founders of Tau Kappa Alpha and now a commissioner of the Civil Aeronautics Board, Robert E. Freer, member of the Federal Trade Commission, Carl Taeusch, Head of the Discussion Division of the Department of Agriculture, J. R. Steelman, Director of Conciliation in the Department of Labor,—all will discuss the types of speaking essential to the conduct of affairs in their respective fields; and William D. Boutwell, Chief of the Radio Division, Office of Education, will discuss the place of radio in the secondary school curriculum. These are but a few of the people *outside* our association who will speak to us. Our own members will have too many interesting things to say for me to list them here. A glance at the preliminary program, which you will have received before this is printed, will show that a group of energetic program sponsors have provided pointed discussions of nearly all our major subject matter divisions. And finally, one afternoon has been set aside for round table discussions on "Current Problems Facing Speech Teachers Today," at which there will be no formal reports; everyone will join in thrashing these problems out.

3. *This is a good time to see Washington.* No city is the center of more attention than is Washington today. Quite apart from tours to the Folger Shakespeare Library, the Radio Stations, Mount Vernon, the Capitol Buildings —all places of interest in normal times—there is added the indefinable atmosphere of a great capital during a world crisis.

4. *You can renew old friendships.* Many of the most pleasant convention memories come from informal meetings in the halls. Your friends will look forward to meeting you there again.

These are four good reasons why most of you will be at the Silver Anniversary Convention. Your officers have worked hard planning it; now it is *your* convention.

ALAN H. MONROE

CONVENTION SCHEDULE

National Association of Teachers of Speech

Sunday, December 29

Afternoon—Committees and Council
Evening—Council

Monday, December 30

9:30—Business Meeting
10:30—General Session
12:00—Alumni Luncheons
2:30–4:30—Sectional Meetings: Elementary School, Rhetoric, Radio, Debate Questions, Linguistic Phonetics, Speech Correction Methods
5:00—Reception
7:30—Debate Materials

Tuesday, December 31

9:30–11:30—Sectional Meeting and Demonstrations: Junior Colleges, Interpretative Reading, College Forensic Programs, High School Forensics, Experimental Phonetics
12:00—Association Luncheon and General Session
3:00–5:00—Sectional Meetings and Demonstrations: High School Curriculum, Voice Science—Experimental Phonetics, Discussion, Audio-Visual Aids, Elementary School Demonstration
5:00—Reading Hour
Evening—Council Meeting

Wednesday, January 1

9:30–11:30—Sectional Meetings: High School Teachers Training and Licensing, Speech Correction Research, American Oratory, Tests and Measurements, Interpretative Reading
12:00—Luncheons
2:00—General Session
3:00—5:00—Round Table Discussions
5:00—Reading Hour
Evening—Council Meeting

Thursday, January 2

9:30—Business Meeting
10:00–11:30—General Session
Afternoon—Washington Tour

American Educational Theatre Association

Monday, December 30

8:00—Registration
9:00—Business Meeting
10:30—Joint Session with N.A.T.S.
12:00—Committee Luncheons; College Luncheons
2:00–4:00—Sectional Meetings: College and University, Secondary
4:00—Reception A.E.T.A.
5:00—Reception N.A.T.S.

Tuesday, December 31

9:00–10:30—General Session
10:30–12:00—Sectional Meetings: Contests and Festivals, Children's Theatre, An Introductory Appreciation Course
12:00—N.A.T.S. Luncheon
3:00–5:00—Sectional Meetings: New Phases of Production, Graduate and Professional
Evening—New Year's Eve Party

Wednesday, January 1

10:00–12:00—Sectional Meetings: Playwriting, Designers and Technicians
2:00– 5:00—General Session
Dinner Hour—A.E.T.A. Banquet
Evening—Movie Program

Thursday, January 2

9:00—Business meeting
12:00—Luncheon new and old officers and council

PROPOSED AMENDMENT TO ARTICLE IV OF THE CONSTITUTION OF THE NATIONAL ASSOCIATION OF TEACHERS OF SPEECH

Sec. I. Omit the words "prepare the program for the National Convention" and substitute in their place the words "direct the administration of the ASSOCIATION" so that section I will now read:

"The President shall direct the administration of the ASSOCIATION, preside at all business meetings of the ASSOCIATION and of the Executive Council, and represent the ASSOCIATION before other academic organizations. He shall consult with the Executive Secretary in the formulation of any plans involving the expenditure of any considerable sum of money."

Sec. II. Revise so as to read:

"The First Vice-President shall prepare the program for the National Convention with the advice of the President, and perform the duties of the President on occasions of the latter's disability or absence."

Approved for publication in the QUARTERLY JOURNAL by:

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PROPOSED AMENDMENT TO THE CONSTITUTION OF THE NATIONAL ASSOCIATION OF TEACHERS OF SPEECH

We, the undersigned, propose the following amendment to the Constitution of the National Association of Teachers of Speech providing for a standing Committee on Finance:

"The Executive Council shall elect a Committee on Finance of three members to hold office for terms of three years. One member shall be elected each year. No member shall serve for more than two consecutive terms. The Executive Secretary shall be an ex-officio member."

ALAN H. MONROE
H. L. EWBANK
GLADYS L. BORCHERS
CHARLOTTE G. WELLS
A. T. WEAVER
A. M. DRUMMOND
H. A. WICHELNS
C. K. THOMAS
H. D. ALBRIGHT
F. W. HABERMAN

NEW BOOKS

Papers in Rhetoric. DONALD C. BRYANT, editor. St. Louis: the editor, 1940; pp. 55; paper, $.50.

This little book is a collection of seven papers in rhetorical history and criticism which were read by their authors during the meeting of the section on Rhetoric at the Chicago convention of the National Association of Teachers of Speech.

The first study in the volume, "Thomas Wilson's Contributions to Rhetoric," by Professor Russell Wagner contains a summary statement of the nature of Wilson's *Arte of Rhetorique,* as well as a brief sketch of the place which that work occupies in the history of rhetorical theory. Quite significantly, it reasserts, in the face of certain questions raised by Sandford, essentially the same interpretation of the *Arte* that Professor Wagner has elsewhere published.

The second paper, "The Positions of Argument: An Historical Examination," by Wilbur Howell, is an analysis of the complex and elusive doctrine of *status* as found in the *de Inventione.* The author points out a number of rather hidden, but nevertheless unmistakable applications of the concept of *status,* which have been made in modern textbooks.

Professor Karl Wallace, in his study entitled "Early English Rhetoricians on the Structure of Rhetorical Prose," surveys the general position of Tudor and early Stuart rhetoricians on speech structure. Professor Wallace's work reflects to some degree what he has previously written on the subject.

Dr. Alvin Dieter contributes to the collection an excellent research paper on "The Rhetoric of Notker Labeo." The author has brought to his task of examining the work of this little known writer a broad background of classical learning and linguistic ability.

Professor Bower Aly, who writes on "A Rhetorical Theory for a History of Public Speaking in the United States," designates three major fallacies of interpretation into which the critic of oratory may be drawn.

Dr. Loren D. Reid discusses "Factors Contributing to Inaccuracy in the Texts of Speeches" in a paper which should be of especial interest to students of seventeenth, eighteenth and early nineteenth century English oratory. A somewhat more complete treatment of the subject is presented in the author's study of Fox.

In the last essay in the collection, entitled "The Influence of Verbalisms in American Political Campaign Speaking," Professor Robert T. Oliver points out the circumstances that lead campaign speakers to couch their ideas in popular phrases that can "mean all things to all men." He also presents a useful classification of the most common types of political verbalisms.

These studies represent a uniformly high standard of scholarly research and creative writing. Although a number of the papers, as the authors realize,

suffer because of space limitations, the collection will be of value to every serious student of rhetorical history and criticism.

DOUGLAS EHNINGER, *Western Reserve University*

Intelligent Reading. By EDWARD A. TENNY. New York: F. S. Crofts and Company, 1938; pp. xii + 363. $2.00.

Although use of this book will be largely confined to remedial classes in English, inasmuch as intelligent reading is prerequisite to intelligent speaking, teachers of speech, especially of interpretation, will find it of value.

To it every college student in the land should be exposed, for it teaches a skill he notoriously lacks: meticulous attention to the denotation and connotation of words, sentences, and paragraphs. It shows how context conditions meaning, how a writer's character may be judged from his writing. It presents a highly practicable technique for grasping whole meaning through analysis of who, whom, what, how, why, where, and when. Half the book is devoted to special problems: distinguishing between objective and subjective facts, between base and honorable propaganda, the weaknesses of digests and editorials, how to read and answer examination questions, how to comprehend reflective passages and poetry.

Its pedagogy is scrupulously, soundly worked out. Principles are taught through series of precisely stated rules; illustration is copious and pointed. Exercises provide constant check and growth: there are 78 formal exercises on perforated pages, numerous informal ones embedded in the text. Perhaps its only fault is a sort of begging of the question: to read this book profitably one must first be an intelligent reader. To this reviewer, much of the material calls for a degree of concentration far above the level of freshmen he has known.

J. CALVIN CALLAGHAN, *Lehigh University*

Oral Readings for Moderns, (Vol. II), by ELISE WEST QUAIFE. New York: Samuel French, Inc., 1940; pp. 123. $1.00.

The author's preface states that her first volume called forth the comment that "many readers had become so interested in the selections, that they bought and read the entire story in each case." That is a fine response. The stories are very well chosen and interesting enough to elicit such a reaction. The book will be one we will love to pick up for a leisure half hour, as one would take up a current magazine story. They will also be interesting to read orally to an intimate group around a fireside who can be entertained and who will enjoy very much having these stories read to them. However, if these stories are designed for public reading, as the book's "jacket" indicates,—"adapted for use in clubs, high schools, churches, declamatory contests, everywhere,"—it is doubtful if the stories hold dramatic interest enough to appeal to mixed audiences. The author also indicates that her selections are for platform reading. The material might be more expertly "cut" for dramatic interest, and the arrangement improved, if to be used for public readings.

MAUD MAY BABCOCK, *University of Utah*

First Person Singular (A Book of New Monologues) by FLORENCE RYERSON and COLIN CLEMENTS. New York: Samuel French, Inc., 1938; pp. 110. $1.00.

The title is most cleverly intriguing. As indicated in the foreword by the actress, May Robson, there must be a demand for "more published monologues." Miss Robson says that "a chance remark to this effect led my dear friends, Florence and Colin, to writing sketches, first for their own amusement and ours, then, later, for publication, platform, and radio use." Also we find such material so often presented, sometimes in costume, always with overdone impersonation on many, many church entertainments. Audiences seem to laugh at and with the impersonator, so this book should have a wide sale. The monologues will be used by impersonators of the same I.Q. as that of the audiences and of the characters in these selections.

The volume also includes two pages of verse, "Tales Out of School"—"The Little Girl Shares Her Secrets." This verse is *not* in the same pattern as that of A. A. Milne.

MAUD MAY BABCOCK, *University of Utah*

Projects for Radio Speech. By HENRY L. EWBANK and SHERMAN P. LAWTON. New York: Harper Brothers, 1940; pp. 158. $1.00.

This is the first workbook for classes in broadcasting that has come to my attention and will probably be used by teachers as good "busy work" for students. Mr. Ewbank, of the University of Wisconsin, and Mr. Lawton, of Stevens College, are as able as any men in the field, but while textbook material is introduced in the workbook, it lacks the completeness of the many good texts on the market and also by necessity there is little relationship or organization in the text material. I am delighted to have copies of *Projects for Radio Speech* which give me many ideas to be used in the teaching of radio speech classes. However, the thought of having to correct the various daily reports is depressing. The manual suggests to instructors in radio a few new approaches to radio activities. The pages devoted to dramatized commercial continuity and radio dramatics are better than most textbooks. There are questions in the manual so that the student may supplement class discussions and cover many points not treated by the instructor. A fault with such a workbook is that its rigidity may kill the interest of students in broadcasting. I recommend it, however, as a guide for the instructor.

Make up and arrangement:

Section I. Microphone projects in ten units or rounds, with assignments, informational data and an analysis sheet for each.

Section II. Laboratory and listening projects in 25 units involving critical analyses of all types of programs, voice improvement, writing, rewriting, adaptation and use of music.

Section III. Four complete scripts of 15 minutes each.

Section IV. Appendix—consisting of a general information test, the ABC of radio (based upon the N.A.B. pamphlet), an illustration of radio English, and an excellent bibliography.

WALDO ABBOT, *University of Michigan*

The Effect of Stress Upon Quantity in Dissylables. By NORMAN E. ELIASON and ROLAND C. DAVIS. Bloomington: Indiana University Publications, Science Series, No. 8, 1939; pp. 56. $1.00.

This monograph is significant not only because it makes a useful contribution to our knowledge of the duration of speech sounds, but chiefly because it demonstrates a practical method of "bringing together the allied fields of historical phonology and experimental phonetics."

The Problem: Does variation in stress upon the second syllable of a dissyllabic containing a single intervocalic consonant affect the quantity of the preceding sounds? Historical linguists have given conflicting explanations of quantity changes occurring at various periods in the history of the English language, but none of these scholars has sought experimental evidence. Eliason and Davis bring such evidence to bear upon the historical problem.

The Method: By means of an electro-acoustic system the experimenters made graphic records of 151 pronunciations by 21 different speakers of eight dissyllabic nonsense words having a single intervocalic consonant. Since the experimenters found that "quantitative variation in a stressed vowel due to a change in phonetic environment is . . . the same in vowels of different quality," they based their results on analyses of 68 records of *tooten* [tutən] and 55 records of *tooty* [tutɪ]. The findings were then applied to the explanation of quantity changes which occurred during the twelfth and thirteenth centuries in seven groups of Old and Middle English words in which there was no other change in phonetic environment than change in stress.

The Results: Stress level difference—*i.e.*, concentration of stress on the first syllable and reduction of it on the second—was found to be the chief factor affecting length of the vowel [u], medial [t] explosion, and the final syllable [n]. In the light of these facts Eliason and Davis reason that since stress was being concentrated on the first syllable and reduced on the second during the development from Primitive Germanic to late Middle English, and since the first vowel of dissyllabics containing one intervocalic consonant was lengthened during the twelfth and thirteenth centuries, therefore the second syllable stress must have been reduced to a minimum by that time, *i.e.*, the words were reduced from two-measure to one-measure.

The methods and conclusions of the study seem reasonably sound. Only two deficiencies appear: The first is that in style and arrangement the material is cumbersome. The second, which the authors themselves recognize, is that only two nonsense words are studied with any completeness. Full confirmation of the findings must wait upon analysis of many sound combinations in recognized as well as nonsense words. But whether the detailed conclusions of Eliason and Davis are eventually modified or sustained, they have exemplified a type and direction of research whose fundamental usefulness seems unquestionable. The coordination of experimental and historical material is a progressive step. Perhaps it is not too optimistic to hope that it is a first step toward better coordination of the more or less distinct bodies of information (physiological, physical, and linguistic) about speech sounds which now co-exist under the title "phonetics," and toward enthusiastic cooperation among workers in these various aspects of the field instead of the disregard or distrust with which they now often view each other's work.

HORACE G. RAHSKOPF, *University of Washington*

Curtains Going Up. By ALBERT MCCLEERY and CARL GLICK. New York: Pitman Publishing Corporation, 1939; pp. 407. $4.00.

No one seriously interested in the non-professional American theatre should overlook this book. The authors, both thoroughly familiar with the field, present a comprehensive picture of the theatre of community groups.

They begin with an animated, readable sketch of the immediate background, 1900-1939. Then comes the meat of the book: articles of various lengths and content about each of 105 community groups, large and small, from all over the country, describing their beginnings, struggles, growth, decay, and revival; their organization, personnel, publicity methods, sources of income; place of performance, equipment, types of plays; their aims and accomplishments. This main section is embellished with 150 illustrations showing theatre exteriors and a great variety of excellent settings. The authors sum up by extracting from the mass of information some conclusions regarding favorable conditions, direction, financing, theatre buildings, and repertory, and conclude with a plea and the basis of a plan for unity in this non-commercial theatre.

Curtains Going Up is required reading for any group which hopes to establish a community theatre, and directors and executive members of existing theatres also should read it. The teacher of dramatics in college and high school will find here depicted at full length with its defects as well as its qualities the great sprawling theatre, which year after year draws fresh blood from his classes, for most of his students who retain their active theatre interest after graduation express it in this non-commercial theatre. B. H.

Masters of the Drama. By JOHN GASSNER. New York: Random House, 1940; pp. xvii + 804. $3.75.

Masters of the Drama is the sort of book we need; and because it is extensive in its coverage and always competently written it ought to be widely used. But it is not better by one hundred and thirty-two years than Schlegel's 1808 *A Course of Lectures on Dramatic Art and Literature.*

Designed for the general reader and student rather than for the specialist or the theorist, this hefty parade of the dramatists of the world "strives, in the main, to describe the *concrete* manner in which the drama has spoken to the spirit." John Gassner, critic and play-reader, marshals the broad historical tendencies and cultural trends, the brief sketches of various playwrights from Aeschylus to Odets, and hundreds of play synopses with an enthusiasm that is comprehensive and writing that is lucid. Nearly seven hundred playwrights enter the procession, among them the neglected writers of the Near and Far East and the renaissance Italians Tasso, Ariosto, Aretino, and Machiavelli, as well as Bardi and the opera; Ben Jonson and Hauptmann are given their proper leading positions; and the "modern" drama starting with Goethe is allotted more than half the book. Where Donald Clive Stuart's *The Development of Dramatic Art* (1928) limited its scope to those forms of drama which contributed to the development of dramatic art, *Masters of Drama* is prolific in its survey. It adds to its usefulness with a twenty-four page syllabus of "Theatre and Man in the Western World," together with a lengthy bibliography and index.

But for perhaps two reasons the book is not brilliant enough nor original

enough to be thoroughly satisfying. First, the survey limits itself by intention too strictly to the literature of the theatre, to idea and language; it neglects too often the other materials of theatre form which must shape theatre writing. In his preface Gassner declares that drama "levies tribute upon all the arts in order to achieve its purpose" of representing "humanity in moments of maximum tension, conflict, and crisis." But there is very little examination of that playwriting process in the book. The history of dramatics should be the story of writers attempting to find theatrical forms for their ideas.

Second, the book misses a semblance of greatness because as history it is managed only chronologically and not artistically for the purposes of excitement and significance. The facts of drama have not been subjected to much interpretation, nor have they been allowed to shape themselves into any generalizations or conclusions.

EDWIN DUERR, *Western Reserve University*

Experiences in Speaking. By HOWARD FRANCIS SEELY and WILLIAM ARTHUR HACKETT. New York: Scott, Foresman and Co., 1940; pp. XIV and 512 $1.72.

Experiences in Speaking is a text well worth the attention of teachers of speech in secondary schools. The authors have departed somewhat from the usual procedure in a textbook of this kind. In keeping with its name, the book sets forth 228 experiences or objectives for the student. These experiences cover a wide range, varying all the way from the preparation of a ten-minute talk on "Thomas A. Edison's Contributions to Radio" (Experience 1), to the production of a play (Experience 228).

In the early chapters, there is little discussion of the fundamentals involved. Emphasis is placed, rather, upon the situation or experience set up. There is a lack of illustrations. Although it is true that illustrations take up too much space in many texts, the reviewer is inclined to the opinion that there is a pleasing middle ground.

Contrary to the usual practice in recent textbooks in Speech, Phonetics is given but a few pages in the Appendix, while a lengthy chapter is devoted to pronunciation with the use of diacritical marks. The authors do not pretend to minimize Phonetics, for they say in a footnote, p. 121: "There are, regrettably, several systems of dictionary markings. The best is, without doubt, the International Phonetic Alphabet. No popular American dictionary has yet adopted this system, however, so we shall not employ it here." This seems a sensible point of view under the circumstances, and makes the book more practicable than the texts which devote much time to Phonetics and little or no space to diacritics.

Parliamentary Law is also relegated to the Appendix and is given such sparse treatment that the practical value is almost nil. There are also inaccuracies in the treatment of some of the motions.

The authors have ably discussed the different phases of public speaking and have included some experiences in our relations with others which are rarely found in texts of this kind. The book is divided into four parts with the interesting titles: I. Day by Day, II. The Wheels Go 'Round, III. "Ladies and Gentlemen," and IV. "Where Every Man Must Play a Part." Part IV is much

the longest and includes the chapters on We Read Aloud, We Read and Speak in Chorus, We Evaluate Plays and Players, and "We Play Out the Play."

The treatment throughout the book is scholarly and exhaustive. Aside from the lack of sufficient illustrative material and a few minor shortcomings, the reviewer considers the book one of the best texts available.

J. WALTER REEVES, *The Peddie School*

Our Speech. By CELESTE V. DODD and HUGH F. SEABURY. Austin, Texas: The Steck Company, 1940; pp. ix + 598. $1.80.

Mrs. Dodd, collaborating with Dr. Hugh Seabury of the Southwest Texas State Teachers College, has based *Our Speech* upon the daily work in her classes in a San Antonio junior high school. Intentionally elementary, it is undoubtedly understandable by the majority of junior high school students. It should serve well as the foundation for more advanced courses. An outline in the appendix provides a sensible program for a two-year speech course. It is also possible to use the text in a one-year course by eliminating the more advanced subjects such as debate, parliamentary law, dramatics, and speeches for special occasions.

Going on the assumption that children desire to know the history of words, the first two chapters constitute an interesting study of the development of words in general, and of American words in particular. This approach to a junior high school speech course is unique. Certainly, it should motivate interest in speech. The next two chapters are concerned with the voice and body and their functions in the speaking process. Also included in this section is a study of simple phonetics treated in a way which should encourage a lively interest in this subject, often difficult to teach to children. This is logically followed by a chapter in pronunciation. These first chapters are well written and serve as a sound basis for the development of succeeding ones. The next five chapters deal with simple speeches, choral reading, interpretative reading, and conversation. Group discussion, extempore speaking, debate, parliamentary law, dramatics, advanced forms of public address, and radio speech are the subjects discussed in the remainder of the book. The section on parliamentary law is unusually direct and stimulating.

We have long needed junior high school speech texts which are practical, interesting and stimulating both to students and teachers. We have needed junior high school texts written by authors who understand the complexities of early adolescent psychology and physiology. *Our Speech* fills these needs in a creditable manner.

F. L. WINSHIP, *The University of Texas*

University Debaters' Annual, 1939–1940, Vol. XXVI. Edited by EDITH M. PHELPS. New York: The H. W. Wilson Co., 1940; pp. 435. $2.25.

Intercollegiate Debates, Vol. XXI. Edited by EGBERT RAY NICHOLS. New York: Noble & Noble, 1940; pp. 411. $2.50.

Though formal debates still form the nucleus of our debate programs, these volumes reflect more than ever before the variations in form of presentation which are being used today.

Of nine events reported in *The University Debaters' Annual,* five are

not in the orthodox debate form. Significant is the first event in this volume, a symposium-panel-forum by speakers from Oxford and Brooklyn, in which a British speaker philosophizes, "One can't tell what will happen if, for example, London were almost bombed out of existence, or if St. Paul's Cathedral . . . were damaged . . . ." Other interesting forms are a Reserve Rostrum Court presentation in which the court action is to enjoin Roosevelt from running for a third term; a three school (Pitt, Penn, Penn State) split-team cross-examination debate on the Dies Committee; a report of the Model Senate Association discussions and bills on a variety of subjects; a debate on the Roosevelt administration followed by a panel discussion by two members of the audience. The volume is especially to be commended for including excellent reports of audience forums which were held after many of the debates, and for the briefs and bibliographies which should prove very useful.

Intercollegiate Debates has an interesting innovation in its report of the results of the major debate tournaments held in the United States during the 1939-40 season. This is in the Appendix along with the always useful Topic Index of subjects discussed in all volumes of the series. A report of a major innovation in debate annals, the first television debate, between Bucknell and Columbia, highlights the selections in this volume. Of special interest to high schools are reports of a correspondence debate on the high school subject for 1940-41, and of the National Forensic League championship debate of last year. Interesting are reports of several three-man-team debates, reflecting an old orthodox form, and of a symposium-panel-forum on Civil Liberties in which five schools participate, reflecting a newer form of presentation. Most of the reports, omitting the chairman's remarks and the audience forums, seem a little more stilted than those in the Phelps volume.

HAROLD P. ZELKO, *The Pennsylvania State College*

IN THE PERIODICALS

Western Speech, IV, No. 4, May, 1940.

CUNNINGHAM, CORNELIUS C.: "Aims and Techniques of Oral Interpretation." 1–5.

PFAFF, PAUL L.: "The Moto-Kinaesthetic Treatment of Aphasia." 5–9.

PAINTER, MARGARET: "The High School Teacher Speaks." 9–12.

HATLEN, THEODORE: "Give Speech a Chance in Debate." 13–14.

The Emerson Quarterly, XX, No. 4, June, 1940.

HARDY, WILLIAM G.: "What Diction to Teach." 3–4, 8.

EICH, LOUIS M.: "Literary Criticism." 5–6.

GRAY-SMITH, ROWLAND: "The Neutral Vowel." 7–8.

CAMPBELL, GENEVIEVE CLARK: "The 'Free' Theatres." 9–10, 14.

OLIVER, ROBERT T.: "Rare Word Collector." 11–12, 18.

I. RHETORIC, PUBLIC SPEAKING, AND RADIO

HINKS, D. A. G.: "Tisias and Corax and the Invention of Rhetoric." *The Classical Quarterly*, XXXIV, Nos. 1, 2, April, 1940, 59–69.

Tisias, declares the writer, composed a text on rhetoric, containing the verbal teaching of Corax. The treatise dealt only with the oratory of the courts; the principal part of its rhetorical system was the argument from probabilities; and it divided the judicial speech into proem, narrative, demonstration, and epilogue. Tisias probably made a beginning in the classification of topics.

DOMIS E. PLUGGÉ, *Hunter College*

EMPSON, WILLIAM: "Honest Man." *The Southern Review*, V, No. 4, Spring, 1940, 711–730.

A discussion of the meaning of "honest" in our literature during the past three centuries, which is of interest to all who follow the semantics school of Richards and Ogden.

MILO WOOD, *College of the City of New York*

WHITEHALL, HAROLD: "A to Dew." *The Kenyon Review*, II, No. 2, Spring, 1940, 212–225.

An intelligent review of Craigie-Hulbert's *Dictionary of American English*. Praises the catholicity in choosing words that reveal the American mind in action.

M. W.

BURKETT, EVA: "The American Samuel Johnson and His Dictionaries." *Philological Quarterly*, XIX, No. 3, July, 1940, 295–305.

This is a discussion of the first dictionary compiled by an American, and of a later volume by the same compiler.

Propaganda Analysis, III, Cont'd.

"The 'Fifth Column,'" No. 9, July 8, 1940.

"Propaganda for Blitzkrieg," No. 10, August 1, 1940.

"Where England Stands," No. 11, September 1, 1940.

The Public Opinion Quarterly, IV, No. 3, September, 1940.

GRAVES, HAROLD N., JR.: "Lord Haw-Haw of Hamburg: 1. The Campaign Against Britain." 429–442.

DURANT, HENRY and RUTH: "Lord Haw-Haw of Hamburg: 2. His British Audience." 442–450.

The first article examines the content of Lord Haw-Haw's broadcasts, tracing the change in emphasis from reform to revolt. The second article discusses the size and characteristics of the English audience, and the apparent impact of the propaganda upon the people. O. A. H.

Broadcasting, XIX, No. 4, August, 1940.

FLY, JAMES LAWRENCE: "Radio Can Face the Future with Confidence." 17, 68–69.

TAISHOFF, SOL.: "N. A. B. Decrees Its Music Independence." 9–14, 39.

SMITH, HENRY LEE: "FDR vs. Willkie—A Battle of Voices." 48.

GILPIN, LEWIE V.: "Ladies and Gentlemen, the President." 49, 64.

In the first article the chairman of the Federal Communications Commission discusses freedom of speech in a time of world crisis.

Taishoff gives a summary of the activities of the NAB Convention in San Francisco, August 4–7, 1940.

The third article is a commentary on the voice and speech habits and effectiveness of the two leading candidates in the recent campaign.

Gilpin describes the problems involved in broadcasting Presidential addresses and the special methods used in meeting these problems.

II. DRAMA

The High School Thespian, XII, No. 1, September, 1940.

This entire issue is a directory of the leading school and college drama festivals and contests held in the United States during the 1939–40 school year.

National Theatre Conference Quarterly Bulletin, II, No. 2, June, 1940.

ANDERSON, STANLEY K.: "The Off-Season Is On." 3–8.

NORVELLE, LEE: "Trend of the American Theatre Since 1920." 11–21.

Anderson summarizes the rapid growth of America's summer theatre.

Norvelle says, "Today we have in the legitimate theatre what we may call a clear realism which focuses the spotlight of dramatic analysis upon certain social changes which to us are significant and vital and revealing."

WEINBERG, BERNARD: "Contemporary Criticism of the Plays of Dumas Fils, 1852–1869." *Modern Philology*, XXXVII, No. 3, February, 1940, 293–308.

The moral aspects of Dumas' plays were the principal deterrents to complete acceptance. His realism was a point in favor.

HUGHES, LEO: "Attitudes of Some Restoration Dramatists Toward Farce." *Philological Quarterly*, XIX, No. 3, July, 1940, 268-287.

The author describes the struggle against farce carried on by John Dryden and a small group of conscientious writers during the Restoration.

HOUK, RAYMOND A.: "The Integrity of Shakespeare's *The Taming of the Shrew*." *The Journal of English and Germanic Philology*, XXXIX, No. 2, April, 1940, 222-229.

Mr. Houk undertakes to defend the integrity of Shakespeare's *The Taming of the Shrew* by an analysis of the role Tranio plays in Scene II, Act III of the play.

CAMPBELL, OSCAR JAMES: "Shakespeare Himself." *Harper's Magazine*, No. 1082, July, 1940, 172-185.

The writer attacks the theories of the anti-Stratfordians. He scoffs at the story that Shakespeare was an illiterate runaway butcher's boy, and asserts that the playwright came from a well-to-do family, received a good education in the local high school, taught for a time in a neighboring village, and then secured a job as a bookmaker in a London theatre.

The Shakespeare Bulletin Association. XV, No. 2, April, 1940.

SHOCKLEY, MARTIN STAPLES: "Shakespere's Plays in the Richmond Theatre, 1819–1838." 88–94.

SMITH, ROBERT M.: "An Agnostic Life of Shakspere." 75–88.

Mr. Shockley states that fourteen plays of Shakespeare were acted 106 times by the greatest stars of the American stage at the Marshall Theatre, Richmond, Virginia, between 1819 and 1838. The most frequently produced play was *Richard III*.

Mr. Smith gives an appreciative analysis of the *The Life and Art of William Shakespeare* by Professor Hazelton Spencer of Johns Hopkins.

D. E. P.

"The Theatre Takes Stock." Theatre Arts Monthly, XXIV, No. 5, May, 1940.

This is a compilation of opinions by actors, playwrights, producers, stage hands, and dramatic critics, regarding the causes of the plight of the legitimate theatre today.

D. E. P.

Theatre Arts Monthly, XXIV, No. 6, June, 1940.

SORENSON, PER: "Kjeld Abell, Stage Cartoonist." 426–430.

HAMILTON, EDITH: "Who Is This Dionysus?" 430–440.

MOORE, HENRY THORNTON: "Shakespeare on Records." 450–454.

Kjeld Abell, a Danish playwright, has introduced a new medium for the stage, by giving properties a more dynamic and important part in the action of such plays as *The Melody Got Lost* and *Eve Serves Her Time*.

Miss Hamilton constructs from legend an enlightening biography of the god in whose honor the great Greek dramas were presented.

Mr. Moore evaluates most of the obtainable Shakespeare recordings in English.

D. E. P.

BOAS, FREDERICK, S.: "The Malvern Theatrical Festival." *Queen's Quarterly*, XLVII, No. 2, Summer, 1940, 219–230.

This is a summary and appreciation of the work of the Malvern Theatrical Festival from 1929 to 1936. D. E. P.

FINNEY, GRETCHEN LUDKE: "Comus Dramma per Musica." *Studies in Philology*, XXXVII, No. 3, July, 1940. 482–500.

La Catena d'Adore by Ottavia Tronsorelli and Domenico Mazzvicchi, an Italian work of 1626, asserts the writer, is typical of the dramatic form to which *Comus* should belong. The author believes that Milton must have had this musical drama as a source. D. E. P.

Theatre Arts Monthly, XXIV, No. 8, August, 1940.

GREVENIUS, HERBERT: "The State and the Theatre." 557–568.

BERGMAN, GOSTA M.: "Folk Theatre." 583–585.

DYMLING, CARL ANDERS: "The Radio Theatre." 586–591.

SODERBERG, EUGENIE: "The Motion Picture." 603–606.

Mr. Grevenius, describes state support of the theatre in Sweden.

Three organizations, says Mr. Bergman, stimulate the interest of the Swedish people in drama: the National Amateur Theatrical Society, the summer folk theatres, and the State Theatre.

The radio theatre in Sweden plays a very important part in the Swedish broadcasting program. The average number of plays presented a year is 150.

"The Swedish film," states Mr. Soderberg, "is almost a day-by-day diary of the ordinary life of the people, with an acceptable happy ending."

D. E. P.

III. VOICE SCIENCE

(Including Problems of Hearing).

The Journal of the Acoustical Society of America, XI, No. 3, January, 1940.

STEINBERG, JOHN C. and GARDNER, MARK B.: "On the Auditory Significance of the Term Hearing Loss." 270–277.

DUNN, H. K. and WHITE, S. D.: "Statistical Measurements on Conversational Speech." 278–288.

BURRIS–MEYER, HAROLD: "Sound in the Theatre." 346–351.

FIRESTONE, F. A.: "Artificial Larynx for Speaking and Choral Singing by One Person." 357–361.

Steinberg and Gardner summarize: "It is shown that the audiogram is not an accurate indication of hearing impairment for above threshold sounds in cases involving nerve deafness, when the loss in loudness sensation is taken as the criterion; but when the capacity to interpret speech sounds, as indicated by the articulation tests, is the criterion, the audiogram does give an approximately correct indication of the hearing impairment."

Dunn and White report measurements of intensity fluctuations in simple conversational reading aloud of story material. Results differ somewhat from those obtained by Crandall and MacKenzie in 1922.

Burris–Meyer describes experiments in the development of sound control apparatus for use in the theatre.

Firestone describes a new type of artificial larynx which has controls of

pitch, volume, and quality precise enough to allow it to be used not only for speaking but also for the singing of several part harmony by a single person.

Journal of the Acoustical Society of America, XI, No. 4, April, 1940.

BARTHOLOMEW, WILMER T.: "The Paradox of Voice Teaching." 446–450.

LEWIS, DON and TUTHILL, CURTIS: "Resonant Frequencies and Damping Constants of Resonators Involved in the Production of Sustained Vowels 'O' and 'Ah'." 451–456.

FAIRBANKS, GRANT: Recent Experimental Investigations of Vocal Pitch in Speech." 457–466.

Bartholomew develops the theme that conflicts between voice teachers and voice scientists are more apparent than real and are primarily due to differences in aim and terminology. He bases his articles on a concise description of the process of good voice production.

Lewis and Tuthill found that at least two low frequency resonators and two high frequency resonators are typically involved in the vowels "O" and "Ah." The low frequencies, they conclude, are undoubtedly crucial in determining vowel character, while the high frequencies probably contribute only to less basic tonal qualities.

Fairbanks' article summarizes four recent investigations of different aspects of the problem of the fundamental pitch of the male voice during speech.

The Journal of the Acoustical Society of America, XII, No. 1, July, 1940.

DREW, R. O. and KELLOGG, E. W.: "Starting Characteristics of Speech Sounds." 95–103.

BEASLEY, WILLIS C.: "Correlation Between Hearing Loss Measurement by Air Conduction on Eight Tones." 104–113.

BEASLEY, WILLIS C.: "Characteristics and Distribution of Impaired Hearing in the Population of the United States." 114–121.

BURRIS-MEYER, HAROLD: "Sound Control Apparatus for the Theatre." 122–126.

Drew and Kellogg conclude: "The most important observation is that the human voice can start several of the vowel sounds in such a way that the first wave is from 40 to 80 percent of the final amplitude, or in other words with a suddenness comparable to that of keying an oscillator, but this is rare. . . . Progressive build-up at rates which would carry the modulation from zero to 100 percent in 0.05 second are frequent, while the great majority of syllables start more gradually than this."

Beasley's first study concludes: "(1) Correlation between hearing losses... is extremely high and regression is linear for the four tones 64, 128, 256, and 512 cycles... For greater simplicity of audiometer design, a tone near 500 cycles is preferable. (2) ... Since either tone (i.e., 1024 and 2048 cycles) is about equally predictive of the ability to hear speech, a tone in the region of 2000 cycles is preferable. (3) Correlation is lower, dispersion is greater, and regression more irregularly curvilinear for hearing losses on pairs of tones higher... than 1024 cycles... consequently,... more than two tones should be provided at levels above 2048 cycles."

His second article is a description and interpretation of the information on hearing obtained by the United States Public Health Service's investigation

of the nation's health in 1935 and 1936. It was found that one out of every 85 females had an impairment of hearing of 47 db. or worse.

Burris–Meyer describes a portable and completely flexible system of sound control developed by the Living Newspaper in New York and intended especially for the legitimate theatre.

JEFFRESS, LLOYD A.: "The Pitch of Complex Tones." *The American Journal of Psychology* LIII, April 1940, 240–250.

Jeffress undertook a series of experimental studies to test Harvey Fletcher's hypothesis that a complex tone with the fundamental missing is identified by the listener as having the same pitch as the missing fundamental. The studies failed to confirm Fletcher's findings, though Jeffress is careful to make clear that there were important differences between the techniques of the two investigations. V. A. A.

PRESSMAN, JOEL J. and HINMAN, ARTHUR: "Further Advances in the Technique of Laryngeal Photography." *The Laryngoscope,* L, No. 6, June, 1940, 535–546.

This is a report of improvements made in the author's method of laryngeal photography since it was reported in 1937.

PRESSMAN, JOEL J.: "Physiology of the Larynx." *The Laryngoscope,* L, No. 4, April, 1940. 277–

A resume and discussion of the literature for 1939, covering 24 titles, and listing 24 others to be reviewed later.

FOWLER, EDMUND PRINCE: "Extraneous Factors in Quantitative Tests for Hearing." *Acta Oto-Laryngologica,* XXVIII, Fasc. 3, 1/5–30/6, 1940, 283–304.

This detailed study of the effects of masking noises on threshold and loudness level during hearing tests, emphasizes the importance of a sound proof testing room or of calibrating instruments to the noise levels of the room. Whisper was less affected by extraneous sounds than voice.

Annals of Otology, Rhinology, and Laryngology, XLIX, No. 2, June, 1940.

BUNCH, C. C.: "Usable Hearing." 359–367.

HUGHSON, WALTER and WITTING, E. G.: "Estimation of Improvement in Hearing Following Therapy of Deafness." 368–383.

WELLS, WALTER A.: "Some Practical Considerations With Regard to Hearing Tests." 427–437.

Bunch presents evidence for correlation between audiometric tests and tests with shouted voice in cases of profound deafness, and proposes a curve which furnishes, in audiometric tests, a dividing line between "usable" hearing and that which is not "usable."

Hughson and Witting have undertaken to establish a standard whereby different observers may compare the results of therapeutic efforts. These workers suggest that an improvement in hearing to be of any real consequence should show an increase of level of at least ten decibels and should have a duration of at least five years.

Wells, though admitting the impossibility of absolute precision in hearing tests, believes that better knowledge of principles involved and stricter observance of them would help to cut down the margin of error.

ALFARO, VICTOR R.: "The Causes of Deafness." *The Volta Review*, XLII, No. 8, August, 1940, 469–471, 490, 492.

Dr. Alfaro discusses obstructions of the external ear, obstruction of the Eustachian tube, abscessed ears, mastoids, labyrinthitis, otosclerosis, occupational deafness, and congenital deafness.

The Teacher of the Deaf, XXXVIII, No. 226, August, 1940.

PAGET, R. A. S.: "The Speech of the Totally Deaf-Born." 99–101.

CROFT, KATIE E. M.: "Amplifier Work With a Class of Three Year Olds." 104–105.

Paget suggests that the young deaf child will learn to speak more quickly if given a sign language in which every sign is the equivalent of a spoken word or unit of thought.

Miss Croft urges the use of sound amplifiers in connection with training in lip-reading for children who have any hearing at all.

The Eye, Ear, Nose and Throat Monthly, XIX, No. 5, June, 1940.

LISCHKOFF, M. A.: "Surgical Treatment of Deafness: A Review." 137–139, 151.

MACKENZIE, GEORGE W.: "Noise Producer-Voice Test for Simulated Unilateral Deafness." 140–141.

Lischkoff concludes, "It is definitely proven that fistulizing the labyrinthian capsule is followed by enough improvement in hearing to justify its serious consideration as a therapeutic procedure in carefully selected cases."

Mackenzie presents a test of simulation second in value only to the Stenger test (See *Eye, Ear, Nose and Throat Monthly* for January, 1940).

SILVERMAN, S. RICHARD: "Central Institute for the Deaf." *The Educational Forum*, IV, No. 3, March, 1940, 299–309.

An analysis and appreciation of the educational work of the central Institute for the Deaf in St. Louis and of its founder Dr. Max A. Goldstein.

IV. SPEECH PATHOLOGY AND PSYCHOLOGY

ADAMO, CARLO: "Speech Disorders Elimination." *The Eye, Ear, Nose and Throat Monthly*, XIX, No. 6, July, 1940, 180–182, 189.

Adamo declares that "a speech disorder cannot exist with normal voice," and hence proposes restoration of voice to normalcy as a basic means of speech therapy.

ALTMANN, FRANZ: "Significance of Aphasia as a Symptom of Otogenic Extradural Abscess." *Archives of Otolaryngology*, XXXI, No. 5, May, 1940, 819–826.

"Aphasia as a symptom of an otogenic extradural abscess of the middle fossa is rare." In the majority of cases inflammatory involvement may be the main factor in the development of aphasia.

BERMAN, ABRAHAM B. and TRAIN, GEORGE J.: "A Genetic Approach to the Problem of Stammering." *The Journal of Nervous and Mental Disease*, XCI, No. 5, May, 1940, 590–594.

"The development of stammering is associated with emotional instability

occasioned by undue haste, fear, embarrassment, uncertainty of thought and diction, sibling rivalry, and other disturbances of a similar nature."

SCHRIEBER, S. L. BRONSTEIN, I. P., and BROWN, ANDREW W.: "VII. Speech Studies in Cretins: Speech Sounds." *The Journal of Nervous and Mental Diseases,* XCII, No. 2, August, 1940, 169–192.

From a study of 32 thyroid deficient children, ages 3 to 17 years, these workers found that (1) only one child responded to all 98 sounds and sound combinations used and that no child spoke all the sounds correctly, (2) most errors occurred in the lower age and I. Q. levels, (3) some of the cretins developed language facilities in six weeks, (4) their speech ability was at the four to five year old level.

The Laryngoscope, L, No. 5, May, 1940.

BABBITT, JAMES A.: "Progressive Deafness, Otosclerosis and Closely Related Subjects, An Abstract of the Available Literature Published During the Year 1939." 385–451.

MAXWELL, J. H.: "Stenosis of the Larynx Due to Paralysis of the Vocal Cords. Treatment By Submucous Resection of the Vocal Cords." 452–462.

FRANK, DAVID I.: "Hoarseness—A New Classification and a Brief Report of Four Interesting Cases." 472–278.

Babbitt's abstract is arranged in three divisions—(1) Clinical Studies and Research, (2) Medical Therapeusis and Systematic Readjustment, (3) Mechanical and Surgical Procedures. A bibliography is appended.

Maxwell's study is a report of operated cases and includes a bibliography.

Frank classifies the causes of hoarseness in twelve groups, including inflammatory, traumatic, anomalies, allergic, metabolic, occupational, neurogenic, peripheral.

HOWIE, TOM O.: "Tuberculosis of the Larynx in Childhood." *The Journal of Laryngology and Otology,* LV, No. 6, June, 1940, 269–281.

This is a report of laryngeal lesions, their incidence, types, symptoms, and treatment, in 159 children suffering from tuberculosis of the lung.

LEVIN, NATHANIEL MARTIN: "Teaching the Laryngectomized Patient to Talk." *Archives of Otolaryngology,* XXXII, No. 2, August, 1940, 299–314.

From experience in teaching 40 laryngectomized patients, the author concludes that if instruction begins soon after the operation, esophageal speech can be taught to any patient who is willing to learn. A method of instruction is outlined.

MARESH, MARION M.: "Paranasal Sinuses from Birth to Late Adolescence." *American Journal of Diseases of Children,* LX, No. 1, July, 1940, 55–78.

This is a report of a study conducted by the Child Research Council, in which roentgenograms of the sinuses of 100 normal, healthy children were made at regular intervals from the first month after birth to maturity.

DUNNING, HENRY SAGE: "Oral Plastic Surgery." *The Laryngoscope,* L, No. 6, June, 1940, 532–534.

This paper includes some comments on cleft lips and palates.

FINESINGER, JACOB E. and MAZICK, SARAH G.: "The Respiratory Response of Psychoneurotic Patients to Ideational and to Sensory Stimuli." *The American* Journal of Psychiatry, XCVII, No. 1, July, 1940, 27–48.

"A series of experiments was carried out on a group of psychoneurotic patients and of normal controls, in which was studied the effect on the respiration of the administration of a painful stimulus and of its subsequent recall."

Sociometry, III, April, 1940.

MORRISON, JACK: "A Note Concerning Investigations on the Constancy of Audience Laughter." 179–185.

FAY, PAUL J. and MIDDLETON, WARREN C.: "Judgment of Intelligence from the Voice as Transmitted Over a Public Address System." 186–191.

In an investigation involving observation of 23 audiences, Morrison failed to find confirmation of F. E. Lange's contention that laugh reactions tend to be strikingly constant for different audiences, but he did find a high degree of correlation (+.90) between the number of laughs per performance and the size of the audience.

Fay and Middleton observed twelve high school boys, judged to be equal in oral reading ability and with IQ's ranging from 85 to 134, who read material over a public address system to 84 students in psychology. It was discovered that listeners were "only fairly reliable" in their judgments of the intelligence of the speakers based upon merely hearing the voices.

VIRGIL A. ANDERSON, *Stanford University*

BEAR, ROBERT M. and ODBERT, HENRY S.: "Experimental Studies of the Relation between the Rate of Reading and Speed of Association." *The Journal of Psychology,* X, July, 1940, 141–147.

Studies of the reading abilities of 85 college freshmen tended to cast doubt upon the belief held by some that the speed with which an individual associates ideas with printed symbols can be regarded as expressive of a general rate of association or reaction time and thus a possible factor in determining differences in rate of reading. V. A. A.

LARSON, R. P. and FEDER, D. D.: "Common and Differential Factors in Reading and Hearing Comprehension" *The Journal of Educational Psychology,* XXXI, No. 4, April, 1940, 241–252.

A clinical-experimental investigation of the influence of certain psychological abilities upon reading and hearing comprehension. The principal conclusions: comprehension is largely a centrally-determined function operating independently of the mode of presentation of the material; material presented orally should be somewhat less difficult than visually presented material in order to be comprehended with equal effectiveness; certain students should be given remedial training in listening. O. A. H.

FOLEY, JOHN P.: "The 'Baboon Boy' of South Africa." *The American Journal of Psychology,* LIII, January, 1940, 128–133.

Foley summarizes interesting accounts of one of the few reasonably well authenticated records of human children reared in a totally "uncivilized" or animal environment. The "Baboon Boy," supposedly stolen and reared by the infrahuman primates, had no speech at the time of his capture at about the

age of twelve years, but "chattered like an ape." After a number of years of living in a civilized society, he was able to acquire some speech and could even relate details of his past existence among the baboons. V. A. A.

ECKERT, RALPH G. and KEYS, NOEL: "Public Speaking as a Cue to Personality Adjustment." *The Journal of Applied Psychology,* XXIV, April, 1940, 144–153.

Studies of 156 San Jose (California) State College Students revealed that while all correlations yielded low coefficients, "the individual" characteristics as a speaker are associated with abstract intelligence or scholastic aptitude much more than with neuroticism, self-confidence, sociability, or social and emotional adjustment, as measured by the Bernreuter and Bell inventories." V. A. A.

V. SPEECH PEDAGOGY

Platform News, VII, No. 1, September, 1940.
GRADY, C. E.: "More Power to the Federal Government." 3–6.
PALZER, EDWARD: "The Acid Test." 10–12.

These two articles discuss debate problems. The first is an affirmative speech on the National High School Debate Topic for 1940–1941. D. E. P.

GOUDY, ELIZABETH: "Helping Teachers To Use Radio." *California Journal of Elementary Education,* VIII, May, 1940, 239–244.

School programs should be selected in conformity with the educational objectives of the school and to provide experience which cannot be secured otherwise. O. A. H.

HILL, MARJORIE: "One Teacher's Experience In Arousing Interest in Poetry." *The Elementary English Review,* XVII, No. 5, May, 1940, 192–193.

Miss Hill found that children like to read poetry aloud and that they are eager to volunteer for bi-weekly Poetry Day programs. O. A. H.

BURROWS, HELEN J.: "Teaching Oral English." *The English Journal,* XXIX, No. 7, September, 1940, 551–555.

An English teacher of twenty-five years' experience presents her conclusions regarding the teaching of speech. Trained in the atmosphere of "declamation" and "dramaturgy" the author distrusts phonetics and other aspects of the more modern approach. O. A. H.

HUGHES, LOLA, SCHUYLER, RUBY, COOLIDGE, ANNE, BEMENT, GRACE, and STANGER, MARGARET A.: "What Do We Do About Reading in Modern Schools?" *Progressive Education,* XVII, No. 2, February, 1940, 94–97.

This symposium presents some reading methods used in representative public schools.

Who's Who Among Contributors

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Frank M. Rarig (*Some Elementary Contributions of Aesthetics to Interpretative Speech*) has been in charge of courses in public speaking at the University of Minnesota since 1908. He has taught summer sessions at Michigan, Wisconsin and Northwestern. He has studied at Harvard University and in England. He was President of the National Association of Teachers of Speech during 1928–29. He is an honorary member of Delta Sigma Rho.

Lee Norvelle (*Testing for Improvement in Oral Interpretation*) is Head of the Department of Speech and Director of Radio Broadcasting at Indiana University. He trained at the Universities of Iowa, Indiana, Cornell, and Oxford. He is Chairman of the Committee of the N.A.T.O.S. on Cooperation with the National Education Association. He is Chairman of the Committee on the Production of New Manuscripts of the National Theatre Conference. He is National President of Theta Alpha Phi, honorary dramatic fraternity. He is past-president of the National Theatre Association. He is the author of the dramatized version of "The Hoosier Schoolmaster" and "The Will to Speak Effectively."

Raymond George Smith (*Testing for Improvement in Oral Interpretation*) took his A.B. from Earlham in 1938 and his M.A. from Indiana University in 1939. He is now serving as instructor of Speech at North Dakota State Teachers College, Valley City, North Dakota.

Charlotte I. Lee (*Choric Reading and Kinetic Projection*) received her A.B. from the University of Wichita, and her M.A. from the same institution while she held a teaching fellowship after graduation. She has studied under Carol Sheely Williamson of the Academy of Fine Arts in Wichita. Further graduate work was done at the University of Wisconsin. At present she is working on her Ph.D. at Northwestern University. She travelled in theatre centers in Europe during the summer of 1939, and studied Choric Speaking and Drama under Marjorie Gullan at the Speech Institute in connection with the University of London, England. She has taught at Monte Cassino School in Tulsa, Oklahoma, and at Saint Mary-of-the-Woods, Indiana. At present she is head of the Department of Speech at William Woods College, Fulton, Missouri. Row-Peterson has just accepted for publication a one-act Christmas play using the verse speaking choir combined with conventional staging by Miss Lee.

Dean Farnsworth (*The Color-Blind Also Go to the Play*) is technical director of the Hall of Fame Players and instructor in Scene Design in New York University at the Heights; he received his M.A. from Northwestern University. Mr. Farnsworth was formerly instructor in Theatre Arts in the

School of Speech, Northwestern University, Electrical Supervisor of the Federal Portable Theatres; he designed and edited the first "Catalog of the Theatre" for Cleon Throckmorton; he has designed over 200 productions for Childrens', College, Community and Professional Theatres. He has recently specialized in lighting for television and color projection.

Beatrice Lewis (*Carnegie Experiment*) is a graduate of Pennsylvania College for Women. She has done graduate work at Carnegie Tech. Drama Department and at Columbia University. Miss Lewis has done journalistic work for newspaper and magazines and has written plays for stage and radio. She is currently drama columnist for *The Musical Forecast Magazine*. Her most recent playscript, a dramatization of Rip Van Winkle, with music by the Pittsburgh composer Jerry Haines, is being produced this fall by the Pittsburgh Children's Theatre.

Alfred L. Golden (*Personality Traits of Drama School Students*) is an Associate Professor of Speech and Drama at Duquesne University. He received his A.B. and M.A. from the University of Pittsburgh. At present he is Director of the Speech Clinic of Duquesne University. Prior to entering the academic field, he was in the commercial theatre. He wrote and directed "The Female of the Species" and authored the Broadway prison drama "Mimie Scheller." During 1936 and 1937 he was under contract to 20th Century-Fox as a scenario writer. Since then he has returned to the academic fold and has been pursuing advanced work in the field of Speech Correction.

Donald W. Riley (*Conclusions Drawn from the Institutes for Education by Radio*) directs radio instruction in the Department of Speech at Ohio State University. He has studied radio techniques at the University of Wisconsin and the State University of Iowa, and has had experience in broadcasting at Station WLW, Cincinnati, WBNS, Columbus, Ohio, and at several educational stations. He has observed radio practices in Germany and France, and spent the summer of 1940 conferring with radio officials in Guatemala and Mexico. He has published a "Handbook of Radio Drama Techniques," and is now working on a study of radio propaganda in Central America.

Howard W. Townsend (*Psychological Aspects of Radio Speech*) is an instructor in speech at the University of Texas. Before going to that institution four years ago he did seven years work in English and speech in the Texas public school system. He received his B.S. and his M.A. from the University of Texas and has done work toward the Ph.D. at the University of Wisconsin. Mr. Townsend is a frequent contributor to *The Texas Outlook*. His recent articles have been "The Worst Class in School," "Factors to be Considered in Making a School Budget," and "Let's Have Public Speaking." The article that appears in this issue is a revision of a paper prepared and presented before a group of radio workers at the University of Wisconsin.

Eugene C. Chenoweth (*The Adjustment of College Freshmen to the Speaking Situation*) graduated from the University of Illinois. He has done graduate work at the University of Colorado and at the University of Iowa, where he is working toward his Ph.D. He taught in the secondary schools of Illinois before joining the staff of the State University of Iowa.

Jon Eisenson, (with Sylvia Souther and Jerome Fisher) (*The Affective Value of English Speech Sounds*). Mr. Eisenson received his M.A. and Ph.D. degrees in Psychology from Columbia University. He is a member of the Brooklyn College Speech Department, and taught in the Speech Department of the University of Wisconsin during the summers of 1939 and 1940. He is the author of the *Psychology of Speech*, and is co-author of the forthcoming text on the *Psychology of the Physically Handicapped*. He has had several articles published in speech and psychology periodicals dealing with the problem of the personality of stutterers.

Irving J. Lee (*General Semantics and Public Speaking*) is instructor in public speaking in the School of Speech, and Chairman of the Division of the School of Speech in University College, in Northwestern University. He received his B.S. from New York University in 1931, and his M.A. and Ph.D. from Northwestern University in 1935 and 1939 respectively. He is now at work on an *Introduction to General Semantics* for use in courses in public speaking and discussion.

Raymond H. Barnard (*General Semantics and the Controversial Phases of Speech*) is Associate Professor of Speech at Ball State Teachers College, Muncie, Indiana. He was graduated from the University of Minnesota and holds his advanced degrees of master of arts and doctor of philosophy from the University of Wisconsin. He has taught in public schools in Lakewood, Ohio, and Detroit Lakes, Minnesota; in the teachers colleges at Springfield, South Dakota, La Crosse, Wisconsin, and Muncie, Indiana. At Ball State Teachers College he teaches persuasion, interpretation and the drama, and sponsors the college dramatic club, Spotlight. He has contributed professional articles to the QUARTERLY JOURNAL OF SPEECH, *Emerson Quarterly, The Southern Speech Bulletin, Gavel, Forensic, Platform News, School and Society, Clearing House, The High School Teacher, The Elementary School Journal, Speech, Childhood Education, School Activities,* and *The Speaker* of Tau Kappa Alpha.

Raymond T. Carhart (*Air-flow Through the Larynx*) received his M.A. (1934) and Ph.D. (1936) from Northwestern University. Since 1933 he has been a member of the Speech Department at Northwestern University, being at the present time Assistant Professor of Speech Re-Education. His research interests have been in the fields of the physics of the speech mechanism, the physiology of the normal speech process, and the treatment of speech defects.

Elbert R. Moses, Jr. (*A Brief History of Palatography*) is Assistant Professor of Speech at the Ohio State University, where he has been for the past two years Assistant Director and Director, respectively, of the Ohio High School Speech League. He was graduated from the University of Pittsburgh, and holds his M.S. and Ph.D. degrees from the University of Michigan. He has also attended the Northwestern University Graduate School, summer session. Before going to the Ohio State University he was for two years Instructor in English and Director of Speech Improvement at the Woman's College of the University of North Carolina. His publications include, "Palatography and Speech Improvement," *Journal of Speech Disorders*, vol. IV, no.

2; *A History of Palatography Techniques,* Edwards Brothers, Ann Arbor, Michigan, 1940; *Interpretations of a New Method in Palatography,* Edwards Brothers, 1940; "Palatograms Change with Rates of Articulation—a Study of Synchronous Kymographic and Palatographic Recording," *Archives Neérlandaises de Phonétique Expérimentale,* vol. XVI, 1940, (joint authorship with Dr. R. H. Stetson of the Department of Psychology, Oberlin College and Dr. C. V. Hudgins of the Clark Institute for the Deaf); *A Work-Book in Persuasion,* Edwards Brothers, 1939. He is a member of Phi Alpha Theta and Tau Kappa Alpha.

Walter H. Wilke (*A Speech Profile*) was educated at Wisconsin and Columbia, receiving his Ph.D. from the latter institution in 1929. He is Assistant Professor of Speech and Assistant to the Dean at Washington Square College of Arts and Science, New York University, where he has taught Speech since 1928. His research has been in the field of propaganda techniques, audience analysis, American dialects and speech standards as well as in speech correction. He has had articles in THE QUARTERLY JOURNAL OF SPEECH, *The Journal of Social Psychology, Journal of Genetic Psychology, Journal of Consulting Psychology, Archives of Psychology.* He is co-author with J. F. Snyder of *Effective Pronunciation: A Phonetic Analysis of American Speech.* He is the contributor of a chapter on Public Speaking in a forthcoming volume on *Applied Psychology.*

Alice Flickinger (*Speech Training in the Elementary Schools of Wisconsin*) is a teacher of Speech and English in Lake Bluff School (Elementary), Shorewood, Wisconsin. She received her A.B. degree from Iowa State Teachers College and her M.A. from the University of Wisconsin.

F. Kenneth Brasted (*A Utility Speech Course: An Experiment in Cooperation*) received his A.B. from the University of Florida in 1935, his M.A. from Teachers College, Columbia University, in 1938, and is now working on his Ph.D. at New York University. For two years, following a year as an assistant in the Department of Speech at the University of Florida, he was engaged in organizing a Department of Speech at Ocala, Florida, in the high school. Since 1938, he has been chairman of the Department of Speech at Fordham College, Fordham University, New York City. He has written for *The Southern Speech Bulletin* and is a member of the New York League for Speech Improvement.

Alexander M. Buchan (*The Teacher of Speech in English*) is Scottish. He has an M.A. (Hon. 1st) of Aberdeen, and was for a time a student at Worcester College, Oxford; a High School English department head in Forres, Scotland; in charge of English, College of the Sacred Heart, St. Louis; Assistant Professor of English, Washington University. He is interested in things practical, and began to feel sorry for the engineers in Washington University. His course is an outgrowth of this interest.

J. Calvin Callaghan (*Social Facilitation in Persuasion*) is Assistant Professor of English and Speech and Director of Debating at Lehigh University. He holds A.B. and M.A. degrees in English from the University of Mich-

igan, where he was active in forensics; he has pursued graduate study in speech at the University of Wisconsin during the past three summers. For the past two years he has been Executive Secretary of the Debating Association of Pennsylvania Colleges and Editor of its *Bulletin*; an article by him on public-opinion polls as evidence in debate appears in the December number of this *Bulletin*.

Lionel Crocker (*Walt Whitman's Interest in Public Speaking*) is in charge of the courses in speech at Denison University. He is Editor of *The Speaker* of Tau Kappa Alpha and Executive Secretary of that organization. His book *Public Speaking for College Students* will be published by the American Book Company in 1941.

Wilbur Elwyn Gilman (*Logic and Public Speaking*) received his A.B. from Cornell in 1923 and his Ph.D. in 1937. His dissertation, "Milton's Rhetoric: Studies in His Defense of Liberty," was published in *Missouri Studies*, July, 1939. He is Chairman of the Department of Speech (newly created), 1940, of the University of Missouri. He has taught at Cornell, and is at present President of the Central States Association of Teachers of Speech.